DOCUMENT RESUME

ED 233 105 UD 023 009

TITLE	IMPACT II Catalog of Teacher-Developed Programs, 1982-1983.
INSTITUTION	New York City Board of Education, Brooklyn, N.Y. Div. of Curriculum and Instruction.
SPONS AGENCY	EXXON Education Foundation, New York, N.Y.; New York City Economic Development Council, N.Y.
PUB DATE	83
NOTE	129p.
PUB TYPE	Reference Materials - Directories/Catalogs (132) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Classroom Techniques; *Demonstration Programs; Elementary Secondary Education; Program Descriptions; *Program Implementation; *Teacher Developed Materials: *Teaching Methods
IDENTIFIERS	*Impact II; New York City Board of Education

ABSTRACT

The Impact II teacher-to-teacher network was created in 1979 to enable New York City public school teachers to learn about successful classroom programs from one another. The project is based on the belief that many successful programs begin in the classroom and that teacher interaction is the best way of disseminating information about these programs. This Impact II catalog presents profiles of 96 exemplary, teacher-developed programs in New York City. The profiles are organized by subject area and classified according to appropriate grade level. Subject areas of the programs include art, bilingual education, career education, communication arts, computer education, foreign languages, health education, home economics, mathematics, music, physical education, science, and social studies. Some programs combine two or more subject areas and others cut across grade levels. Each profile includes a brief description of the program, students, staff materials, facilities, outside resources, and program value, and indicates where to obtain more information. An index of participating teachers, by borough and school district location, is provided. (MJL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

IMPACT II Catalog of Teacher-Developed Programs, 1982-1983

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

T. K. Minter

NYC Public Schools

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- ✓ This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED233105

UD 023 004

IMPACT II Catalog of Teacher-Developed Programs, 1982-1983

Office of Special Projects

Division of Curriculum and Instruction New York City Public Schools

Frank J. Macchiarola, **Chancellor**

Richard F. Halverson, **Deputy Chancellor**

Thomas K. Minter, **Deputy Chancellor for Instruction**

New York City Board of Education

Joseph G. Barkan, **President**
Amelia Ashe, **Vice President**
Stephen R. Franse
Irene Impellizzeri
Marjorie A. Lewis
Miguel O. Martinez
James F. Regan

IMPACT II in the New York City Public Schools is administered by the Division of Curriculum and Instruction in cooperation with the Economic Development Council.

Division of Curriculum and Instruction

Charlotte Frank, **Executive Director**

Office of Special Projects

Lawrence Larkin, **Director**

IMPACT II Program

Ellen Dempsey, **Director**
Deidre Meyerson, **Assistant Director**
Margot Jones, **Coordinator of Staff Development**

131 Livingston Street
Brooklyn, New York 11201
Telephone: 852-0227

Funds for IMPACT II are provided by a grant from Exxon Education Foundation with additional support provided by the New York City Public Schools.

IMPACT II Program

Ellen Dempsey, **Director**

IMPACT II Independent Schools Program

Ellen Meyers DuKore, **Director**
Suite 1700
111 Broadway
New York, New York 10006
Telephone: 587-9711

Independent School Advisors

Gardner P. Dunnan
New York Guild of Independent Schools

John C. Esty, Jr.
President
National Association of Independent Schools

Stephen Hinrichs
Executive Director
The New York State Association of Independent Schools

Neen Hunt
New York Guild of Independent Schools

Jean Reeve Oppenheim
President
Association of Teachers in Independent Schools

Allan Shedlin, Jr.
President
Lower School Administrator's Association

IMPACT II Independent Schools Program is funded by the Exxon Education Foundation and administered in cooperation with the Economic Development Council.

Table of Contents

Message from the Chancellor 3
Foreword 4
Acknowledgments 5
Introduction 6
IMPACT II Program Profiles 7
  - Art 7
  - Bilingual Education 17
  - Career Education 21
  - Communication Arts 29
  - Computer Education 55
  - Foreign Languages 61
  - Health Education 63
  - Home Economics 69
  - Mathematics 71
  - Music 79
  - Physical Education 83
  - Science 87
  - Social Studies 99
IMPACT II Review Committee Members 122
Participating Teachers 123
Index 124

Message from the Chancellor

IMPACT II, and its teacher-to-teacher network, is making a significant contribution to school effectiveness. By supporting teacher-developed programs, the school system can bring about stable improvement in both instructional programs and teacher morale.

In his evaluation report on IMPACT II, Dr. Dale Mann of Teachers College, Columbia University, sums up IMPACT II: "When the public is clamoring for accountability, focusing on process takes courage. The successes of IMPACT II come from trusting teachers, supporting their judgment, honoring their commitment, and then carefully crafting and nurturing a network to facilitate the changes they undertake."

Because IMPACT II has proved an effective means of staff development, the New York City Public Schools have entered into a partnership with the Exxon Education Foundation in support of IMPACT II. This begins the process of incorporating IMPACT II into the fabric of the school system and institutionalizing the program. In addition to the continuation of IMPACT II in the New York City Public Schools as an ongoing pilot beyond the initial three-year commitment, the Foundation is funding a cooperative program with the New York City independent schools. I welcome these teachers to the IMPACT II network and the opportunity for the exchange of program ideas among public and private school teachers.

Congratulations to all the teachers whose programs appear in this year's **IMPACT II Catalog of Programs** for your creativity in developing innovative programs, and for your eagerness to provide information and materials to colleagues throughout the city. And to the teachers who will take one or more of these ideas and "go creative"—welcome to the IMPACT II network. Your commitment to your own professional development and, in turn, to your students is appreciated and applauded.

Frank J Macchiarola

Frank J. Macchiarola
Chancellor
New York City Public Schools

Foreword

By supporting the dissemination of innovative programs developed by teachers, and by encouraging and assisting other teachers to adapt these programs, the IMPACT II teacher-to-teacher network facilitates grass-roots staff development throughout the school system. And by identifying programs that serve the special education and the bilingual student as well as the gifted and talented and the average achiever, IMPACT II not only brings the school system together but stresses the equity due all our students, no matter where they are in the system. The IMPACT II network reaches out to all teachers in New York City.

Since the inception of IMPACT II in 1979, the Division of Curriculum and Instruction has taken an active role in disseminating materials prepared by IMPACT II teachers throughout the New York City Public School system. The division has also provided a forum in which IMPACT II teachers present their programs to other teachers and administrators. This year the division has turned to the IMPACT II network for ways in which to reach students enrolled in Promotional Gates classes, in order to make a difference in those classrooms. IMPACT II teachers have provided exemplary curriculum models in mathematics, reading and writing.

We look forward to the continued growth of IMPACT II and to discovering more ways in which the outstanding teachers involved in its network can work together to better the education of all our students.

Charlotte Frank
Executive Director
Division of Curriculum and Instruction

Acknowledgments

The IMPACT II Catalog of Teacher-Developed Programs, 1982-1983 was prepared as a project of the Division of Curriculum and Instruction and the IMPACT II Independent Schools Program.

Grateful appreciation is extended to all of the teachers who wrote their own profiles of the programs that appear in this publication. This catalog could not have come into existence without their expertise and cooperation.

Ellen Dempsey, IMPACT II Director, supervised the publication. Ellen Meyers DuKore, Director of Communications, coordinated its production. Deidre Meyerson, Assistant Director, provided technical and research assistance. Marie Bobetsky and Peter Britton, consultants, provided editorial assistance. Andrea Marquez, designer, directed all graphic work.

Introduction

IMPACT II was created in 1979 to enable New York City Public School teachers to learn about successful classroom programs from one another. IMPACT II is based on the belief that many successful programs begin in the classroom and that a most effective method for disseminating them is through teacher-to-teacher interaction. The IMPACT II network, hundreds of teachers strong, now includes independent school teachers as well as public school teachers. With the publication of the **IMPACT II Catalog of Teacher-Developed Programs, 1982-83,** teachers throughout the city—working in both public and independent schools—will have the opportunity "to take an idea and go creative."

How to Use the Catalog

This catalog is a collection of profiles describing 96 exemplary programs, selected on the basis of criteria developed by a review committee composed of teachers. The profiles are organized by subject area, then subdivided by grade level. However, replication often takes place across grade levels, and program ideas may easily be adapted to any grade level. The names of the developer teachers, each of whom received a developer grant, are listed at the end of the profiles, together with the school address and telephone number and the principal's name. Please feel free to contact the developer teacher directly. Assistance is also available from the IMPACT II office, as is staff consultation.

IMPACT II Services

- **Replicator/Adaptor Grants.** If you are interested in replicating or adapting one of the programs that appear in this catalog, you are eligible to apply for a replicator/adaptor grant of $200.00. Request an application from the IMPACT II office. The application period closes at the end of March. Some teachers replicate programs without applying for grants; they are called informal replicators. If you have already received an IMPACT II grant, you are welcome to informally replicate additional programs.
- **Intervisitations.** If you are interested in getting a firsthand look at a program, or if you are interested in inviting a developer teacher to your school to help you get started on adapting his or her program, staff can arrange for an interschool visit. This service is available to any New York City public or independent school teacher—formal or informal replicators.
- **Workshops.** IMPACT II sponsors a workshop series every fall highlighting developer programs. In addition, developer teachers present workshops at conferences throughout the year, and the IMPACT II staff will coordinate workshops upon request. Teacher-consultant time is arranged for workshops that take place during the school day.
- **Take an Idea and Go Creative.** A television series that highlights developer programs is aired on WNET/THIRTEEN and Channel 25. A viewing schedule is available from the IMPACT II office. These videotapes, as well as others, are also available to schools upon request. They are ideal for faculty conferences and may be borrowed for up to two weeks.
- **"IMPACT II Star" and Other Materials.** The "IMPACT II Star" is a quarterly newsletter that keeps teachers posted about IMPACT II activities, and provides news about developer and replicator programs and the teachers involved in the network. Contact the IMPACT II office for a complimentary copy. When there is a demand for more information about a program, IMPACT II, together with the developer teacher, will produce an instructional manual. Periodically, the newsletter lists these and other materials available from the IMPACT II office.

Public School—Independent School Exchange

For the first time, the **IMPACT II Catalog of Programs** contains profiles of programs developed by independent school teachers as well as public school teachers, and both groups are invited to cross-replicate programs and adapt materials and to use IMPACT II services.

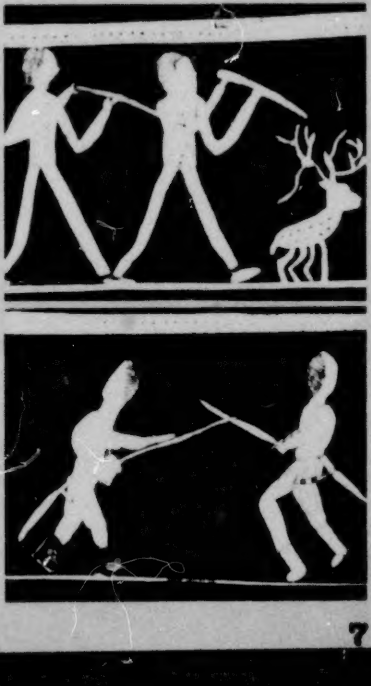
Please feel free to contact:

IMPACT II, Division of Curriculum and Instruction, New York City Public Schools, 131 Livingston Street, Brooklyn, New York 11201 (852-02?7)

IMPACT II, Independent Schools Program, Suite 1700, 111 Broadway, New York, New York 10006 (587-9711)

Ellen Dempsey
Director, IMPACT II

IMPACT II TEACHER-DEVELOPED PROGRAMS


Madi Lanier

Art Appreciation—Masters to Pops

The Program

Art Appreciation—Masters to Pops teaches recognition and understanding of the works and lives of famous artists of the past and present. At the end of each lesson, students are advised of the artist to be studied next. They use the interim time to collect material about the artist (e.g., visit the library, and check for pictures and books at home). The teacher should have at least one good book and one poster-size print of the artist's work. As the teacher reads a summary of the artist's life to the children, they add anything they have learned through their research. The style of the artist is thoroughly examined and discussed after careful observation of the large prints. After the discussion, the children organize and write a one-page biography of the artist that reflects their research. Then they create their own artwork which can be an attempt to directly copy the print, a reflection of the artist's style or a new project from their own imagination.

The Students

This year the program was used with 36 fifth-grade intellectually gifted students. It can be easily adapted to any level of the fourth or fifth grade.

The Staff

The program was implemented by one fifth-grade teacher in a regular classroom setting.

Materials and Facilities

Library books, art books purchased from discount book stores, books and pictures from home and an accumulation of magazine pictures are all needed.

Outside Resources

Trips to the Brooklyn Museum, the Museum of Modern Art, the Metropolitan Museum of Art and the public library are fine resources.

Overall Value

After participating in this program, children look at art more intelligently, according to Diane Weiss, the developer. "They learn to appreciate people and 'things' that are considered 'different.' Their writing skills, vocabulary and spelling improved greatly. Parents also learn and become involved. The program works because it's a hands-on approach for teaching art appreciation. Students learn about and *remember* works of the masters because they have actually duplicated specific works, using the techniques and qualities employed by the artists."

More Information

Diane Weiss
P.S. 52
2675 East 29th Street
Brooklyn, NY 11235
Telephone: 648-0882
Principal: Bernice D. Brooks

MARKERS
For Drawing, Doodling and Coloring
MARKERS
For Drawing, Doodling and Coloring
MARKERS
For Drawing, Doodling and Coloring
MARKERS
For Drawing, Doodling and Coloring

Brian Chez

Art History

The Program

Art History is a program in which children get to know the art of another culture by experiencing it. The children look at examples or reproductions of the art or craft of a different civilization and time, analyzing their style, technique, concept and function in that culture. The students learn to appreciate both the great variety of ways in which people have brought beauty into their lives and the diversity of the creative mind. The student is never asked to imitate—both skills and experience are lacking—but to immerse himself or herself in the particular art form and then to create an original work of art. Each project, by its nature, emphasizes a specific concept and skill. African masks, for example, are stark, three-dimensional faces. The stylized features and large abstract shapes are used to convey a sense of religious rite or ceremony. Other arts that are studied include Byzantine mosaics, Persian miniatures, and American Indian pottery. One sample project is figure painting on Greek vases. The class looks at pictures of Greek vases and talks about the importance of sports and mythology and their representation on the vases. Concepts are discussed and various elements of design are explained, including pattern, shape, line, and light flat figures on black backgrounds. Each child gets a large (14-by-24 inch) black sheet of paper and a slightly smaller sheet of beige or reddish paper. On the latter, each child draws large figures engaged in a sport of his or her choosing, such as baseball, dancing, skating, or boxing. The figures are drawn, cut out, and glued on the black background, producing a flattened design similar to those on Greek vases. Line drawings are added with fine markers, to show details. The class then visits the Metropolitan Museum and looks at Greek vases—which now have heightened interest for the children, since their own work has let them enter into the creative mind of that culture.

The Students

The program has been in operation for seven years, each year with three groups of third-grade students of about eighteen children each. The reception has been extremely enthusiastic. The program could well be done in greater depth with higher grades, and in conjunction with social studies. Some projects, such as Indian Pottery, have been coordinated with classroom study of the American Indian. During one term, the Greek vase project was coordinated with the reading of mythology.

The Staff

Madi Lanier, kindergarten through third-grade art teacher, developed the program with the full support of the administration. She has taught at the Fleming School for eight years. She is a working artist and has paintings and mosaics in various private collections.

Materials and Facilities

An average-size art room or classroom is fine. The usual art materials are needed: construction paper, crayons, markers, clay, cardboard, tempera paint, glue, staplers. In addition, each project might require one or two special items.

Outside Resources

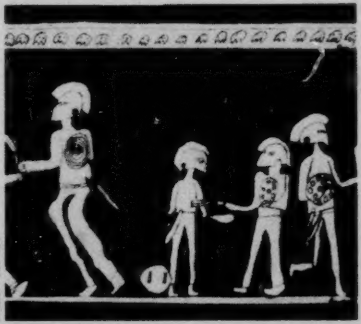
Books and reproductions are needed. Visits to the Metropolitan Museum, the American Museum of Natural History and others are desirable, if feasible.

Overall Value

Art History enlarges the child's visual vocabulary and gives him or her insight into both the expression and function of art in other societies and the diverse materials and skills used. Says developer Lanier: "It's also a step, in a world of conflict, toward greater understanding and respect for other cultures."

More Information

Madi Lanier
Fleming School
10 East 62nd Street
New York, NY 10021
Telephone: 759-6822
Director: Douce Correa



Madi Lanier

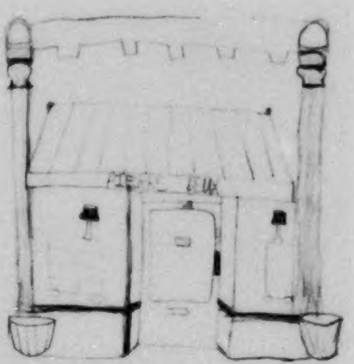
Children's Mural Program

The Program

The *Children's Mural Program* is an elementary/junior high school art program based on curriculum material that involves cooperative design and production of large-scale thematic murals. It is adaptable to varied age and size groupings. It provides an excellent opportunity for group problem-solving and for interaction between classes. With overall direction by the art faculty, the program can be integrated with such subjects as geography, architecture, mathematics and community studies. The program can be duplicated at any school having an empty wall surface on the premises or in the neighborhood. Guidelines for each phase of the mural-making process have been developed, including theme selection, scheduling, observation, drawing, field trips, creation and critique of scaled mock-ups, and preparation of wall surface. There is video and photographic documentation of past murals, both in progress and completed, that would be available to teachers wishing to undertake a similar program.

The Students

This program can involve an entire school or a single class. Grades kindergarten through eight participated in the planning and execution of a 10-by-60 foot mural at the Village Community School during the 1979-80 school year, as part of the school's 10th-anniversary celebration. Other program formats have included creation of a smaller indoor mural depicting the Lower East Side, done by students nine and ten years old, as part of their social studies curriculum. A current project involves the design, by two classes of nine- to eleven-year-old students, of a "trompe d'oeil" style, full-scale mural intended to enliven the atmosphere of an inner play yard for the younger classes. As the project advances, additional sessions will be scheduled for measuring, preparing the wall, doing scale models and painting. Students of all ages can contribute effectively to any mural project.



Natasha

The Staff

This mural program was suggested by Sari Grossman, a classroom teacher of grades nine to eleven. The program has been implemented through close cooperation with other teachers and staff, ranging from the building manager to the director. Although it can be undertaken with relatively little staff support, the collaborative goals of the program make broader involvement by staff, parents and administration desirable.

Material and Facilities

The program does not require elaborate or expensive materials. Aside from the fundamental requirement of a blank wall surface, other materials not likely to be found in a school's art supplies are wall paint, gypsum, wire brushes, and cleaning agents.

Outside Resources

Students take field trips for observation drawing, identification of landmarks, historical research and viewing of other murals. As part of the program, guest speakers address students, and parents contribute labor (helping to clean walls) and supplies. Library resources are used extensively to provide background in both content and technique. Such organizations as City Arts Workshop and two children's museums, the Staten Island Children's Museum and the Manhattan Laboratory Museum, are additional resources.

Overall Value

The *Children's Mural Program* enables students of different ages to work together towards a common creative goal as they use curriculum themes to beautify their own and others' environments. The program also provides practical application of specific skills taught in art, with the dual goals of reinforcing curriculum content and making the school more attractive physically.

More Information

Sari Grossman
Village Community School
272 West 10th Street
New York, NY 10014
Telephone: 691-0477
Director: Sheila Sadler

Self-Discovery through Art

The Program

Self-Discovery through Art is a series of integrated art projects designed to encourage self-awareness and to stimulate artistic development by using the student's own feelings and experiences. The first project is a psychological self-portrait. After a discussion of portraiture and what it can reveal to the viewer, students create their own portraits as insights into their nature, feelings and experiences. Examples of the work of such artists as Rembrandt or Van Gogh illustrate the ensuing discussion.

Working in groups, a light is reflected on one student's face while another traces the shadowed profile onto art paper taped to a board. The student whose shadow has been traced creates the self-portrait collage using images, colors, words, magazines, newspapers and symbols. Composition and design are stressed.

For the second project, each student obtains a recent photograph of his or her face. After a discussion of dreams and aspirations, each student transforms his or her personal thoughts into a visual image by designing a body for the face, using suitable materials. Attention is given to body proportion and the figure in motion. The finished "figures" may then be arranged in a "class portrait."

The third project, face masks, introduces the student to body sculpture. Masks are introduced by discussing their significance as a form of artistic expression, as well as their meaning in theatre, dance and ritual celebration. Students work in pairs. One cuts "paris-craft" into small strips, dips them into warm water, and applies the strips in several layers to the other's face, which is covered with wet paper towels. The result is a three-dimensional realistic representation that can be painted realistically or abstractly.

The Students

The program is presently taught to the entire eighth grade for ten weeks, three times a week, to above average students. The program is adaptable to both large and small groups at all grade levels, but preferably to grades seven through twelve, whose members can better understand the concepts involved.

The Staff

The program was developed and is presently run by George T. York, who has taught art in grades one through twelve for the past thirteen years and who presently teaches art at The Collegiate School. The program can be implemented by anyone, but art training is helpful. Administrative and staff support are useful but not essential.

Materials and Facilities

A standard art room with a sink enhances the project. The materials needed are generally available in art rooms and can be as simple or as sophisticated as one may choose.

Outside Resources

Visits to such major museums as the Metropolitan Museum of Art, the American Museum of Natural History, the Brooklyn Museum and the Museum of the American Indian are important. Slides and posters of major artists and their work are available at major museums and are relatively inexpensive. Art books are available in city libraries.

Overall Value

This is a well-developed, organized and easily implemented curriculum. Student involvement, motivation and success are inherent in this program. Says developer York: "By using a student's own feelings, experiences and imagination, the results are as unique as the student. Besides allowing for self-exploration and artistic expression, the program stimulates the imagination and encourages artistic development along with self-awareness. Lastly, the program provides for a unique creative outlet while encouraging group interaction, cooperation and student-to-teacher communication."

More Information

George T. York
The Collegiate School
241 West 77th Street
New York, NY 10024
Telephone: 873-0677
Headmaster: Richard Barter

Eaton S. Lothrop, Jr.

Hillcrest Graphic Associates

The Program

This program is a collaborative effort to produce high-quality printed materials for both school clients and outside non-profit agencies (e.g., parents' associations and local amateur theatre groups). Art Career Institute students seek out jobs, then take a concept through the design stages of thumbnail, rough and comp, to finished camera-ready art. At this point the work is turned over to the industrial arts printing class for the steps involved in reproducing the art. During the process, students receive instructional guides on graphic design techniques, graphic design reproduction techniques and use of the Kroy lettering machine.

The Students

There are currently some 35 students involved in this program. They are 11th and 12th year students interested in possible careers in graphic design/commercial arts. This program can be implemented for junior high school classes, if there is a teacher who has graphic design skills. A class size of 25 to 34 is optimum. Larger numbers would require a second class.

The Staff

Norman Berman, the assistant principal for art, initiated the program. He also teaches the group. The specific requirement for any teacher is a feeling for good graphic design and an understanding of graphic design techniques. As a result of the high quality of the work in this program, the school administration is most supportive. It is doubtful that such a program could exist without administrative support.

Materials and Facilities

A standard studio is used for the program. The basic materials and equipment that are employed include drawing boards, T-squares and triangles. In addition, the students are taught to use a Kroy lettering machine (a "must"), which is transported daily from the department office into the classroom. In addition, mechanical lettering and shading films are included as materials. This is the simplest arrangement that can be used and, in theory, one doesn't need any more.

Outside Resources

While not necessary, it is desirable to have an occasional visit from a professional graphic designer to speak about careers in commercial art.

Overall Value

Says program developer Berman: "This program sells itself as a result of the high quality of the produced work. We have designed flyers for the High School Division, the logo and stationery for the New York City Teachers of English, invitations and program covers for the Bernard Fineson Center in Queens, and posters and playbills for school productions. The savings by doing the printing in-house over sending it out are considerable. The program pays for itself."

More Information

Norman Berman
Hillcrest H.S.
160-05 Highland Avenue
Jamaica, NY 11432
Telephone: 658-5407
Principal: Steven Feldman

Monument to Myself:
Self-Awareness through Model Building

The Program

Using techniques of model building, students in *Monument to Myself* build a scale model of a monument they have designed for themselves and write a description of it. The description includes an appraisal of how their public face differs from their private face, and how they have represented this difference. Working in a scale of one-quarter inch to one foot, students build an imaginative structure, including an exterior that represents what the world sees about them and an interior that represents their private self. The concepts of "on-stage" vs. "backstage" and of "community vs. privacy" are developed. Students write a composition on the building of the monument; they explain its appearance and why they made the choices they did to represent a specific quality. They hand-letter an explanation of their work and make a presentation to their classmates, who may ask questions. Monument models with explanations alongside are exhibited at the end-of-term art show. Examples of student structures include a tower that can be entered and exited only by a rope suspended on the outside; and a building that was painted black on the outside and gold on the inside, with an open top to indicate that its builder was still "growing."

The Students

The students in the class have been, and are this year again, high school juniors and seniors taking an architecture course. However, the project is applicable to any art class on the high-school level, as well as in a unit on architecture, city planning or environmental design.

The Staff

The program was developed by Bryna Eill, an art teacher, and can be undertaken by any art teacher without outside assistance. The program is supported by the assistant principal in charge of the department and by the principal.

Materials and Facilities

Art tables are desirable but not essential. Materials used include matboard, chipboard, glue, razor blades, T-squares, triangles, rulers, and magazines from which illustrative material to paste on the walls of the monuments may be clipped, if desired. Paint and surface textures may also be used.

Outside Resources

None is essential, but slides and postcards or illustrative material about monuments erected to individuals are helpful as enrichment. For example, pictures of Grant's Tomb, New York City; the Lincoln Memorial, Washington, D.C.; or Constantine's Arch, Rome, Italy, illustrate why and how monuments are built. Books that are useful for the teacher to read include Simone de Beauvoir's *The Second Sex;* Ivan Chermayeff's *Community vs. Privacy;* and Edwin Gitner's *Hidden Dimensions*.

Overall Value

The great value of this project is that it enables young people to explore themselves and their relationship to others and to the world around them. The idea that each individual is worthy of a monument is made concrete. A youngster's self-esteem invariably grows as a result of making decisions about how to represent him- or herself and then presenting the monument to the group members—who are invariably supportive. Useful skills learned are measurement, scale, model building and verbal skills of writing and speaking. Affective skills developed are examination of one's self as one appears, or would like to appear, to others, and exploration of the private self which is hidden or unable to be expressed. One youngster covered his exterior with sandpaper and painted the inside gold. "The message this lad was sending," says Eill, "is fairly obvious."

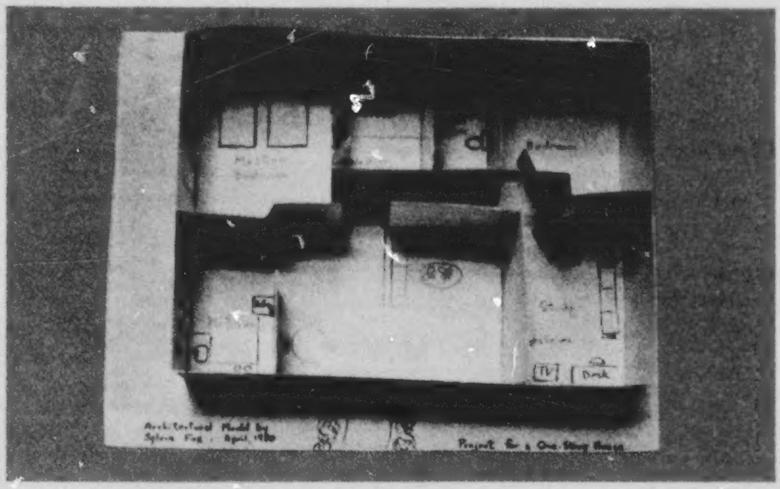
GARRY TRIMBLE

Bryna Eill

More Information

Bryna Eill
H.S. of Music and Art
135th Street and Convent Avenue
New York, NY 10031
Telephone: 926-0870
Principal: Richard A. Klein

Planning Your Dream House or Apartment



Sylvia Fox

The Program

In this program, students learn to design architectural floor plans and to build architectural models of their "dream house" or apartment. Beginning with the floor plan, students learn how to develop livable designs. They learn how to plan for practical considerations such as meeting individual needs, privacy, convenience, step-saving, cross-ventilation, etc. A brief study of historical and contemporary styles leads into designing the facade and wall elevations. Students then set to work on their own houses, first drawing floor plans, facades and wall elevations. Finally, the students construct small models of their houses. Teachers interested in this program can obtain instructional materials, dimensions and sample floor plans from its developer.

The Students

Each term for the past three years, 50 to 60 students at James Monroe High School have taken this unit on architecture as part of the required art class. These classes are highly motivated—everyone wants to design a "dream house"—and therefore attendance and level of achievement have been high. The elements of this course are easily adapted to students at various skill levels.

The Staff

Fox has been teaching art for 17 years. Before that she worked in the architectural field as a secretary and draftsperson. The principal and the department assistant principal have been very supportive and interested in the success of this course.

Materials and Facilities

An ordinary art room can be utilized. Students at James Monroe work on plain tables, but drafting boards are definitely recommended if their acquisition is at all possible. The course can be conducted with ordinary art supplies, although the students greatly benefit from *real life* drafting equipment such as T-squares, compasses, triangles and architectural rulers. However, if necessary, the course can be conducted with graph paper, standard rulers, bristol board and glue.

Outside Resources

Access to professional floor plans is helpful but not absolutely necessary.

Overall Value

In the opinion of Fox, this course possesses vocational value by helping students learn basic drafting skills. It also has general practical value in guiding them to a knowledge of what to look for, and select, in a home or apartment. It provides general cultural value by acquainting students with the history of architectural styles. And a major value lies in its ability to make the future seem real, and therefore attainable if planned for.

More Information

Sylvia Fox
James Monroe H.S.
1300 Boynton Avenue
Bronx, NY 10472
Telephone: 893-5800
Principal: Joseph DeJesus

Student-Made Filmstrips

The Program

Student-Made Filmstrips is a program that allows students to develop a coherent story theme and carry it through the actual photography to the final delivery of finished filmstrip and accompanying tape. A topic is chosen and thoroughly investigated. It could be something like "civics" or "building restoration." Pertinent photographs are then taken from life or illustrations selected. Department chairpersons may be consulted during the development of a subject. The class works as a body and uses one camera—a 35mm, half-frame, single-lens reflex. The black-and-white film is developed and transferred to black-and-white positive film (Kodak Fine Grain Release Film Type 5302). A 35mm contact printer is used which accommodates a 10-inch strip. Strips can be spliced together to form a 30-frame filmstrip. Students may add their own comments on a tape recorder, which is then played as the filmstrip is shown.

The Students

The course is a part of two classes in photography with thirty-four students to a class. The teacher is assisted by either a student teacher from college or two students trained as mini-teachers. Since the program has only a minimum of equipment, some of the students create a story in book form, on photographic paper, instead of in a filmstrip. Smaller groups work better. Mini-teachers are a great help in any size group. As an extra bonus, the mini-teachers develop skills in leadership and responsibility.

The Staff

This program evolved gradually from other photography and writing programs. The department chairperson was very helpful in aiding developer Alice Charlton, who bought much of the equipment for the pilot project on her own.

Materials and Facilities

An old book closet with an electrical outlet, painted black inside, serves as an adequate darkroom for handling Tri-X and Positive Film No. 5302. The contact printer is an inexpensive ($6) setup supplied by Instructional Media Associates of Tempe, Arizona.

Outside Resources

The outside resources used in this program are the 42nd Street Library, the school library for visual aids, the department library and New York City itself.

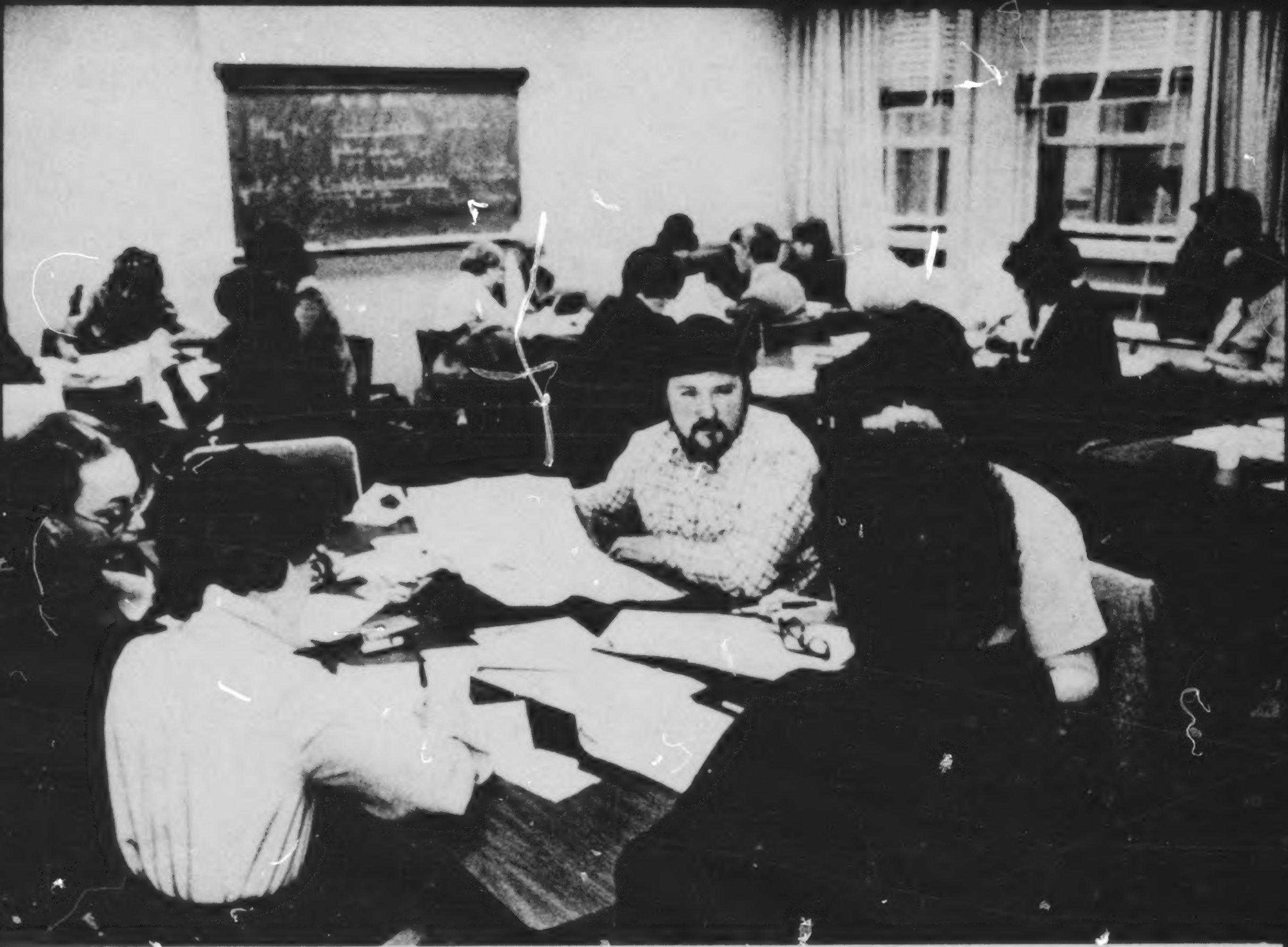
Overall Value

The filmstrip may be a before or after production. The story may be written for a sequence of frames, or the frames may be shot to accommodate the legend. If it is for review or reinforcement, the students in the disciplines using the films may actually create the filmstrip material, with the photography students performing the production end. The filmstrip projector is easier to manage than an overhead projector. It is also less expensive, more compact and comes closer to affording the sophisticated experiences of real movie-making.

More Information

Alice Charlton
Washington Irving H.S.
40 Irving Place
New York, NY 10003
Telephone: 674-5000, Ext. 25
Principal: Melvin Taylor

H. Henken



John Cole

Selecting Grant Award Recipients

The IMPACT II Review Committee meets each year to screen and rate applications to determine the grant award recipients for the coming school year. The committee is composed of 25 teachers from elementary schools, junior and senior high schools and special education classrooms. Both public and independent schools are represented, and applications from the two sectors are screened together.

A Multi-sensory Approach to Mainstreaming

The Program

A Multi-sensory Approach to Mainstreaming uses pictures, filmstrips and books to develop oral, reading and writing skills in English while also sensitizing students to people who are handicapped. Students are shown pictures of handicapped people. Then the class discusses the nature of the handicaps, what it means to be handicapped, and what can or cannot be done because of a particular disability. After the discussion, the children write essays telling what they've learned about handicapped people. Students also role play, using blindfolds and crutches, in order to have a sense of being handicapped. Then they write about how they felt during the experience.

The Students

The children involved this year were third graders participating in a bilingual (Spanish-English) instructional program. The program can be adapted to students in the fourth through sixth grades.

The Staff

The program was developed by Joyce Fonollosa, a Title I ESL teacher, and Gloria Santiago, a third-grade bilingual teacher. Technical assistance and support were rendered by a professor from Long Island University, the school's principal, the bilingual guidance counselor and a resource room teacher.

Materials and Facilities

Developers Joyce Fonollosa and Gloria Santiago have prepared a resource kit for teachers that includes materials and pertinent information: a step-by-step instructional guide, lesson plans and activity schedule; a bibliography for children and teachers; lists of films and filmstrips; pamphlets such as "Plain Talk 'Bout Children with Learning Disabilities" (National Institute of Mental Health, U.S. Department of HEW, June 1979); and booklets such as "People . . . Just Like You—About Handicaps and Handicapped People" (an Activity Guide by the Committee on Youth Development, The President's Committee on Employment of the Handicapped). Also included in the resource kit are a glossary of special education terms (i.e., aphasia, brain-injured child, educable retarded); an IEP (individualized educational program) manual and checklist, and a manual alphabet.

Outside Resources

Children have visited homes for the retarded, heard guest speakers and planned a visit to Long Island University to meet and exchange ideas with handicapped university students.

Overall Value

This program stimulates oral and written skills development while it acquaints teachers, children and parents with handicapped people. The program facilitates the mainstreaming process by making teachers aware of and sensitive to disabled people. Children in the regular classes benefit by having their misconceptions, fears and myths about handicapped people dispelled. The program also helps to create a more comfortable environment for the child who is to be mainstreamed.

More Information

Joyce Fonollosa and Gloria Santiago
P.S. 133
375 Butler Street
Brooklyn, NY 11217
Telephone: 834-6908, 9
Principal: Seymour Gothelf

See It—Say It—Think It—Write It

The Program

In *See It—Say It—Think It—Write It,* English as a Second Language students use their newly acquired skills to read and reinforce English language patterns (set phrases) through criterion-referenced materials in literature (e.g., poetry, stories and plays). With some minor adjustments, the basic format—a series of lessons and some games developed in the simple two-part sentence—can be used for all elementary grades. The concept is also applicable to the secondary level. A sample lesson involves such criterion-referenced items as regular and irregular nouns, singular and plural words, the verb "do," and negative contractions. Specific lessons have been developed for most of the elementary criterion-referenced items. One example uses a language pattern to be taught via the poem "I Speak, I Talk, I Say," by Arnold J. Shapiro. Students make their own sentences using the vocabulary from the poem, pictures on rubber stamps, and noun cards with appropriate verb cards. The plural inflections of the noun and the verb card are color coded. The children set up their own sentences using one noun card and one appropriate verb card. Reading and writing activities evolve from this procedure. When the children have become familiar with all the patterns, this makes for an excellent warm-up drill. The activity also lends itself easily to games such as Concentration, Matching Pairs, and Go Fish. There is also an evaluation component: reading, dictation practice and rewriting by changing one key element of the pattern at a time.

The Students

Sixty bilingual students participated in this ESL program last year. They ranged from kindergarten to fifth grade. Their achievement levels ranged from non-English to second-grade readers. It was a "pull-out" program of small-group instruction (10 to 12 students). The group met forty-five minutes a day, five days a week. (Kindergarten met twenty minutes a day.) The program can be adapted to other age groups and other achievement levels. It can also be used with the monolingual child and in whole-group instruction.

The Staff

Teacher Teresa Guage has developed and implemented this program over a period of years. The classroom teacher or the ESL teacher can implement this program, with the approval of the administration.

Materials and Facilities

In a very small school, space is at a premium. Guage works with three round tables, twelve chairs and a chalkboard, in a small alcove in the basement. She uses bookcases, a desk, a file cabinet, a closet, a tape recorder, a record player, a wide variety of library books and a stamp set. The program can also be implemented easily in a regular classroom. A teacher could then use the above materials and have access to a ditto machine as well.

Outside Resources

Field trips to the theater, the circus and the library are necessary components and resources. The PTA has assisted with money for bus trips. Local poets have appeared as guest speakers.

Overall Value

"In this program," says developer Guage, "grammatical patterns can be introduced in a natural sequential way through the total language rather than in specific, minute, meaningless segments of language. The child uses the language of the narrative story or the poem, extends it through memorization and dramatization and makes it a part of his or her schema, or experience. The student can later draw upon these experiences for reading comprehension and writing, thus 'internalizing' language and using it correctly at the appropriate time. Teachers need only to get their hands on good narratives and poetry that illustrate a particular pattern and then go to work."

More Information

Teresa P. Guage
P.S. 65
157 Richmond Street
Brooklyn, NY 11208
Telephone: 277-4821
Principal: Roy Blash

Mobile Speech Therapy

The Program

This program, *Mobile Speech Therapy*, is designed to develop the auditory and visual sequential memory skills of the bilingual, language-impaired child through the making of mobiles, costume jewelry and other art objects. The students are all enrolled in the school's speech and language classes. Improving memory, whether auditory or visual, is always a challenge with language-impaired children. To work with such children, to prevent them from being frustrated by their own inabilities and to get them to try harder is the teacher's objective. By using an art session to bring about improvement in the areas in which students are deficient, the teacher enables the children to feel that they are no longer under a learning handicap. They find that they are improving both their memory and sequencing skills by following directions and by watching and doing what the teacher does. This program has had excellent success so far, and class attendance and behavior have greatly improved.

The Students

Thirty-six students out of fifty-eight enrolled in the School for Language and Hearing Impaired Children (SLHIC), which is ungraded, participate in this program. Ages range from eight to twelve years, and both boys and girls are included. The classes meet two times a week for thirty minutes. On the other three days there are memory drills. The program can be adapted to other groups and other achievement levels. Each group consists of four to six students, a number which has been found to be ideal.

The Staff

The developer of this program is Laura Genova, speech and language therapist at P.S. 25. She is an experienced therapist who has been teaching for four years and has worked with all kinds of students. Her program has not been given assistance, either financially or with paraprofessionals, but has received much praise and commendation from her principal, supervisor and fellow faculty members. The program was paid for last year by Genova herself. Subsequently, she was partially reimbursed from Camping Flea Market sales. All student-made objects are sold at the Camping Flea Market. Proceeds enable students to enjoy a week in the country at a camp supervised by faculty members.

Materials and Facilities

This program is held in the speech room, which is large and brightly decorated with previous work. Children use wooden or plastic colored beads and elastic string to make jewelry. Paper towel or toilet paper rolls, string, paints and pictures cut from magazines are used to make the mobiles. The use of a duplicating machine is helpful when drawing diagrams to show the students the necessary sequencing steps to follow.

Outside Resources

No outside resources are needed.

Overall Value

"This program," Genova says, "was originally set up to improve the auditory and visual memory skills of the bilingual, language-impaired child. As positive results were being seen, it was suggested that the students' handiwork be sold, if the students so desired, at the Camping Flea Market. The selling itself became a learning experience and taught the children how to handle money. This worked so well that they were motivated to make better and more sophisticated objects."

More Information

Laura J. Genova
School for Language and Hearing Impaired Children
P.S. 25—Bilingual School
811 East 149th Street
Bronx, NY 10455
Telephone: 665-2283
Principal: Joseph McCarthy

Marion Bernstein

Career Education Cluster Program

Barbara Miles

The Program

The *Career Education Cluster Program* is a planned sequential career education program, on the elementary school level, for children who should be exposed to possible careers and to the wide variety of occupational choices they will face in the future. It uses a multisensory instructional approach and incorporates many curriculum areas. Emphasis is placed on helping children to realize the importance that skills they are learning today may have for future career possibilities. Children are given opportunities to discuss and role play situations about themselves, their relationships to their peers and adults, values related to their lives and the world of work, and their career aspirations. Students read materials, see filmstrips, write creatively, interview guest speakers and discuss concepts.

The Students

The *Career Education Cluster Program* serves 610 children in kindergarten through sixth grade, as well as special education health conservation students. The program accommodates many ability groupings. Each class meets with the cluster teacher once a week for a period of 45 minutes. Each student has a folder in which the year's work is kept. Average class size is approximately 32 children, but the program can be adapted to smaller groups.

The Staff

The career education cluster teacher, Barbara Miles, developed the program while working in the position of acting guidance counselor, and after being introduced to career education concepts by the District Office 28 guidance coordinator. Miles now conducts the program on a schoolwide basis. She has taught on the elementary level in New York City for 23 years. A minigrant proposal written by Miles was funded in 1979. Parents and community resource people participate in the program, and it has support from the school administration and district office.

Materials and Facilities

The program is conducted in a classroom. Materials used are workbooks, library books, picture sets, bulletin board materials, games, puzzles, filmstrip sets and copied materials. Instructional materials for teachers include: *Career Education Resource Guide*, edited by Bottoms, Evans, et al., General Learning Corporation Publishers, 1972; and *Career Education Program* (Volume I—Kg.-6), by Charles Ryan, Houghton Mifflin Co.

Outside Resources

Parents and community people are used as guest speakers.

Overall Value

The *Career Education Cluster Program* is innovative in that elementary school children have not previously been exposed to this kind of program. It focuses on career education and also includes other curriculum areas. The children and their parents rate this program as important and highly successful because of its cognitive and affective components.

More Information

Barbara J. Miles
P.S. 30
126-10 Bedell Street
Jamaica, NY 11434
Telephone: 276-8785
Principal: Ursula N. Day

Paralegal Studies

The Program

Paralegal Studies is a program which provides students with a hands-on knowledge of documents necessary to the performance of legal tasks, as well as with a motivation toward continued education in the field. The basic program is college level, and students learn law to help a lawyer prepare cases. Students are required to have a knowledge of the law (one year of business law is a course prerequisite) and to apply it to their work. They must understand such legal basics as business law, criminal law and domestic relations law; and additionally, how to start a lawsuit and complete all the necessary papers for trial. The teacher must have a working knowledge of the law. Legal forms that must be explained by the teacher include wills, citation forms, and waiver and consent forms. Also, case problems are used to explain the law. One illustrative example is the case of Billy Rose, which took three years to settle; the will was contested by three wives and two sisters.

The Students

Sixty twelfth-grade students of average achievement level participated in the program. The class met five times a week. The program can be adapted for other grades, and may be used with larger or smaller groups.

The Staff

Frederick Fielman, a teacher who also has a law degree and is a member of the New York Bar Association, developed the program and implemented it. He has been teaching law for 16 years. The program is supported by the department chairperson and the administration.

Materials and Facilities

Most of the work is done in the classroom, where law books, case books and legal forms are used. Projectors and copy machines are necessary.

Outside Resources

Students are encouraged to go to the local courts and see how they operate. Examples are the Surrogate's Court of New York County; the Federal District Court for the Northeast U.S.; and the New York State Supreme Court for Brooklyn and New York Counties.

Overall Value

For students who have an interest in law, but cannot or do not wish to invest the time (seven years) it requires to become a lawyer, this program offers other career alternatives. Two recently created positions in the legal profession are the paralegal and court administrator. Both require only an associate degree, which is a two-year college program. The paralegal carries out such preliminary work for lawyers as investigations, research, filing forms and intake evaluations. However, he or she cannot appear in court; nor can a paralegal negotiate cases. The court administrator carries out the administrative duties of the court (supervising clerks, preparing budgets and assigning personnel) and thereby relieves judges from having to carry out day-to-day administrative duties.

In addition, students who have completed the business law and paralegal studies courses are eligible to take the College Level Entry Placement (CLEP) test. Those who pass earn three college credits in law. "Generally speaking," says Fielman, "the program creates an interest in the law that acts as a job incentive. Many students become so interested that they want to go to college, and plan to make some form of law their career."

More Information

Frederick Fielman
Murry Bergtraum H.S.
for Business Careers
411 Pearl Street
New York, NY 10038
Telephone: 964-9610
Principal: Barbara L. Christen

Working For and Caring About Children

The Program

Today, mothers are returning to work at a time when they may still have young children at home. As a result, there is a greater need for child-care facilities, and many child-care agencies are being established. The program *Working For and Caring About Children* prepares students to meet this challenge. It has three parts. In Child Care I, the students learn the developmental stages of the child. They observe and host children who come to the class once a week from a nearby day-care center. Child Care II and III examine the practical care of young children. Students combine class work with practical experience at a nearby center. This practicum is closely monitored by the classroom instructor, and experiences in the field are correlated with classroom lessons.

The Students

This year 125 students participated, three-fourths of them girls. The program included students from "upper" ninth-grade to graduating seniors. It is felt that juniors and seniors are better equipped to handle the program because they can follow through, whereas, in the case of younger students taking Child Care II, there may be an interruption. This program could work with more students.

The Staff

The program was developed and is implemented by Leoma Williams, who has 32 years' experience in child care and as a dietician. It has the full support of the administration.

Materials and Facilities

No special classroom is required. The program does need audiovisual aids such as an overhead projector, opaque projector, films and filmstrips. It also needs textbooks, materials for arts and crafts, and a budget for food supplies to be used in developing menus for small children.

Outside Resources

The program benefits from field trips to day-care centers, nurseries, parenting groups, hospitals and institutions of higher learning where professions dealing with children can be pursued.

Overall Value

Williams considers the program easy to implement wherever there are child-care centers nearby. She thinks many teachers will adapt this program because of both its low maintenance cost, once the initial materials are purchased, and its value in providing first-hand experiences for students. It gives students insight into such careers as pediatrics, sociology, psychology, and hospital work with handicapped children; teaching kindergarten, head start or nursery; educational television; children's wear and children's toys. "But its greatest value," says Williams, "is as a guide to parenting."

More Information

Leoma Williams
Harry S. Truman H.S.
750 Baychester Avenue
Bronx, NY 10475
Telephone: 320-2300
Principal: Julius Perlman

Packaging and Assembly Workshop for Autistic Adolescents

The Program

The *Packaging and Assembly Workshop for Autistic Adolescents* is a vocational education program that places emphasis upon teaching the vocational and independent living skills necessary in preparing students for an occupational training center or sheltered workshop. The severe communication and behavior disorders of the autistic student are considerably altered when the student is placed in a productive, all-day workshop class. The student is assessed by level of functioning before entering the workshop class. He or she must be able to work independently and must possess communication skills. Once in the class, the students learn to work independently for increasing amounts of time without prompting, and to work cooperatively with others (e.g., performing office skills, learning building maintenance, assembling pens, and packaging items). The student is provided with a wide range of recreational opportunities to foster appropriate social behavior and to utilize related skills. Each student has a bus and subway pass. They go on frequent class trips, thus acquiring travel skills while having academic and social skills reinforced. The students also have had actual jobs in the school. Some have a daily delivery service: collating, clipping, labeling and delivering class messages for the unit coordinator. They also collect the garbage daily throughout the unit on the third floor. One afternoon a week, with the cooperation of the custodial staff, the students clean the entire cafeteria. They utilize the building maintenance skills acquired in the workshop class and at the Queens Occupational Training Center, to which they travel one day a week. A detailed curriculum guide for the *Packaging and Assembly Workshop*, along with suggested evaluation tools and materials, is available to interested teachers.

The Students

Six autistic adolescents, ages 15 to 19 years, are in this program. The students vary in ability from preprimer level readers to those on a fourth-grade reading level. The program is designed specifically for autistic adolescents who can work independently with minimal supervision and have basic communication skills.

The Staff

The program was developed by Joan Becht, a special education teacher who has worked five years with the autistic adolescent population. Becht has also contributed to the development of the New York Public Schools curriculum guide, *Teaching Children with Autism* (See "Materials and Facilities"). The program has the support of the principal and PTA, and requires a paraprofessional's aid.

Materials and Facilities

The program can be taught in any classroom, using large tables rather than individual desks. It uses available school materials (e.g., paper, envelopes, clips, folders and staplers), but more materials are needed to teach specific vocational skills (e.g., sorting bins, office supplies, filing/collating boxes, craft supplies, and so on). Textbooks include: *Teaching Children with Autism: A Teacher Resource for the Instruction of Children with Behavior/Communication Disorders*, New York City Public Schools, 1981; and *How to Create a Curriculum for Autistic and Other Handicapped Children*, Romanczyk, Raymond G., and Lockshin, Stephanie, Kansas, 1981.

Outside Resources

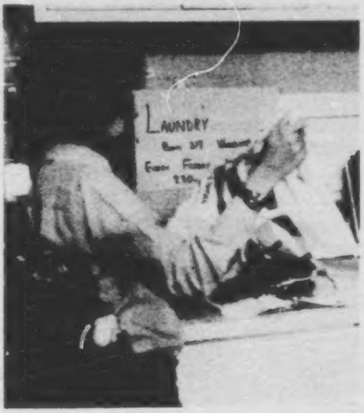
Trips to local supermarkets, museums, the library and McDonald's, as well as weekly sessions at the Queens Occupational Training Center, are an important part of the program. Parents provide funds necessary to go on trips, and the PTA provides vocational tasks for distribution within the program.

Overall Value

The program makes it possible for autistic students to function for the first time in a productive workshop setting. Inappropriate behavior diminishes when the students are involved in vocational tasks that increase their ability to focus on, and succeed at, a given activity. The students frequently develop a sense of job responsibility and pride.

More Information

Joan M. Becht
Queens Occupational Training Center
41-15 104th Street
Corona, NY 11368
Telephone: 424-8548
Principal: Blanche Fierstein



Gregg Gaer

27

3 Y Corp.

The Program

3 Y Corp. is designed to give Braille multi-handicapped students—those children with both a visual and another physical or emotional handicap and learning disability—more help in learning how to deal successfully with the world. *3 Y* is an attempt to provide a realistic situation, making it possible for these children to realize their potential. The students operate three stores within the school setting. *Y 1* sells popcorn to the student body; *Y 2* operates a teacher's cafeteria twice daily; and *Y 3* is a school supply store.

The first step in implementing this program is the organization of committees, such as the rules and regulations committee, advertising committee and so on. The committees analyze what has to be done to start a business, and how best to do it. The store has grown from bagels and coffee served twice a day to a cafeteria offering a large selection of lunch items. The menu has been enlarged at the request of the school staff. The children handle all aspects of the business. They count money, give change, total bills and compute the cash flow for each selling period, using decimals, fractions and percentages. They keep records, graph daily income and expenses, use an inventory sheet and compute profits. They also do comparison shopping in estimating costs and budgets, as well as make deposits in the bank. They read menus and food articles in community newspapers and the *Daily News*. They write a daily log of their experiences, keep daily inventories and prepare menus and advertising copy. Their work teaches them the value of such personal traits as promptness, responsibility, working together, cleanliness and attendance on the job. They know what an employer looks for in an interview, and they have a sense of belonging to a larger community.

Marion Bernstein

The Students

Twenty students in two classes of multi-handicapped children work in the program. One is a Braille multi-handicapped class, and the other is a visually limited multi-handicapped class. The students range in age from 12 to 17. They are heterogeneously grouped, but the program could be adapted to other achievement levels and/or to larger or smaller groups.

The Staff

The program is implemented by Marilyn Lambright, with the assistance of the teacher from the visually impaired multi-handicapped class. Paraprofessionals also assist in the program. Parents act as volunteers to do the shopping with the children, when needed. The program has the full support and cooperation of the principal and school staff, which is an element necessary to its success.

Materials and Facilities

The teachers' lunchroom is the cafeteria. The classrooms are used for the school store. Popcorn, prepared in the classroom, is sold in the children's cafeteria, on a cart. *Janus Books for Reading Development Series:* Janus Book Publishers, Hayward, CA, and *Globe Books for Life:* Globe Book Inc., NY, NY, are used as a supplement to the career skills aspect of the program.

Outside Resources

Store managers of neighborhood supermarkets have been contacted, and visits are made to the stores. The children do comparison shopping among supermarkets. A school account has been opened at a local savings bank, and the tellers help the children with their deposits and withdrawals. Visits have been made to such major city-maintained markets as the Essex Street Market.

Overall Value

Subjective data indicate children have developed positive self-images about their own learning potentials, and as future employees. Their self-esteem has soared. In the actual operation of the store, the children have far surpassed the original goals set; they have become responsible for the total bookkeeping systems necessary for the operation of the *3 Y Corp.* One teacher said, "It's as if these kids came out of the closet!"

More Information

Marilyn Lambright
P.S. 199
270 West 70th Street
New York, NY 10023
Telephone: 678-2833
Principal: Richard Boccadoro

The Vocational Crafts Program

The Program

Vocational Crafts is designed to enable severely and moderately retarded young adults to independently produce creative and functional handicrafts in a school or workshop environment. Skill areas such as woodworking and sewing are task-analyzed into a sequential hierarchy of skill components, each to be mastered before advancing to the next component. It is in this manner that a woodworking skill, such as measuring with a ruler, is taught to the higher functioning students. By incorporating the academic with the functional, students learn how to identify numerals, count in sequence and correspond number to numeral. It is the generalized application of these skills that makes it possible for the students to create a variety of unique craft items, such as picture frames, key chains, book ends, desk sets and necklaces, with minimal supervision.

The Students

Over 200 students in the severe to moderate range of retardation participated last year. They ranged in age from 15 to 21 years. Most students were seen for two periods a week. Adaptation to younger and older age groups and higher achievement levels is easily achieved by changing the pace of instruction or attempting more complex projects.

The Staff

Sam Seifman developed and now implements the program. The program is conducted with the assistance of a paraprofessional, and has the active support of the administration.

Materials and Facilities

Seifman presently functions as a cluster teacher, going to individual classrooms with the necessary materials. Aside from craft supplies for particular projects, only common school supplies are needed: felt construction paper, white glue and the like. An alternative way of implementing the program would be to group students from different classes according to their common skill levels.

Outside Resources

Some good sources for project ideas are the catalogs of the art supply companies and the crafts magazines available at newsstands and bookstores. Craft fairs are excellent places to get new ideas and to see which items are "bestsellers."

Overall Value

Says Seifman: "Although handicapped people have made enormous progress in overcoming many prejudices, one still remaining is the belief that they are burdens on society. In this program, students develop marketable skills. There is a bi-annual school crafts fair where many of their products are, in fact, sold. The bottom line is simple: if we teach marketable skills to the retarded, they *can* become functioning, productive members of their communities."

More Information

Sam Seifman
Brooklyn Adult Skills
Training Center
P.S. 120
18 Beaver Street
Brooklyn, NY 11206
Telephone: 443-9400
Principal: Neil Wasserman

John Cole

Bill Stone

Experiences, Reflections and Insights

The Program

Experiences, Reflections and Insights uses music, discussion and quotations to develop creative expression (writing), thinking (awareness of self and others) and values clarification. The program helps children write about their experiences and, ultimately, to understand them. In the first part of the program the teacher plays five to ten minutes of music while the class relaxes and listens. The music can be of any type: rhythm and blues, popular, soul, Latin, jazz, classical, rock 'n roll. When the music ends, the children receive a few minutes of "think time" to collect and organize their thoughts prior to writing. The students are then instructed to write about whatever they experienced or imagined: thoughts, ideas, feelings, mind-pictures, daydreams, memories, fantasies or present-moment events. The children's writings during this "contemplation period" can run from one to ten sentences in length. The teacher then reads from samples and briefly discusses them with the students. One such discussion a week is sufficient. In addition to the writing and thinking skills developed in the contemplation periods, a new vocabulary describing "experience" evolves. For example, words used to express different levels of anger, love, and sadness are defined. These words become part of the children's working vocabulary.

After 40 contemplation periods, given every other day, the teacher introduces the second part of the program. A quotation, related to the students' experiences and writings, is presented to the class. After teacher and class interpret the quotation together, the students respond by writing their reactions to the saying, and back it up with concrete examples from their lives. The following day, after the teacher has reviewed the writing, five to ten children read their answers in order to attain an overall viewpoint or response to the quote. Also, questions will be asked pertaining to each student's work. This discussion period lasts about 30 minutes. This part of the program attempts to organize and make sense of experience, and is also a way of clarifying values for children. A "vocabulary experience" develops in this part of the program, too. Words such as sensitivity, self-awareness, self-control and self-knowledge find meanings in daily use. After the second phase is introduced, the program requires four periods a week: two contemplation periods (writing followed by discussion) and two periods devoted to the interpretation (written and oral) of a quotation. Explanatory sheets are available for teachers seeking to replicate the program.

The Students

The program involved 80 elementary school children from the fifth and sixth grades. The level of achievement was below average for most of the students. The program can be adapted to junior and senior high school students and can be utilized with large or small groups; just the music and the quotations are changed.

The Staff

Jeffrey Pflaum developed and implemented this program over the past three years. He has been an inner-city elementary school teacher for 13 years, producing poetry, plays and stories for children as well as educational programs in creative-thinking, and creative-writing, and vocabulary-expansion exercises. His program can be implemented entirely by the classroom teacher, and it is supported by the administration.

Materials and Facilities

This program can be run in any self-contained classroom. The teacher needs either a record player or a cassette tape recorder for the music. The music can be supplied by the school, students or teacher. Spiral notebooks (supplied by the children) or four-by-six-inch index cards are used for writing down experiences and responses to the quotations. *Bartlett's Familiar Quotations* by John Bartlett (Boston, 1955) is used as a basic source for quotations. However, additional lists of quotations are available for teachers who want to replicate the program.

Outside Resources

None is necessary.

Overall Value

One value of the program is very evident: After 40 contemplation periods using many different types of music, students' writings show greater openness, honesty, awareness and sensitivity to themselves and others. Also, students really enjoy the periods when they can relax, listen to music and then respond with their "experiences" that range from reality to fantasy. On an academic level students' writing, thinking, listening and reading skills improve. The acts of thinking, feeling, sensing, experiencing and imagining—all important skills in life—are built into the program, and are necessary to the "process" of reading. Questionnaires completed by the students state that the contemplation periods help their reading ability.

More Information

Jeffrey Pflaum
P.S. 16
157 Wilson Street
Brooklyn, NY 11211
Telephone: 782-5352
Principal: Steven J. Braunstein

Fact and Fantasy Inspire Creativity

The Program

Fact and Fantasy Inspire Creativity is a program designed to encourage reluctant readers and writers by promoting reading and writing as fun-filled activities. It underscores the importance of attitude, imagination, motivation and exploration. The program encourages the study of prose, with particular emphasis on the classics. Books are classified into interest areas, such as science fiction, mysteries, historical, adventure, family and animal life. Elements of each area are carefully studied so that children will be able to distinguish between categories. Books selected conform to the reading levels of the children. Learning centers are set up for small-group and individual listening and viewing activities.

Use of filmstrips, records and tapes is encouraged. Cartoon-type rexograph materials, dramatized sections of books, and exciting excerpts and pictures are used to stimulate creative ideas and imaginative writing. Deriving inspiration from the study of books, the children write, illustrate and edit their own "mini-classics." These children's stories range from true-life adventures, to adventures in outer space, to a fantasy tale of a huge lobster. The lobster destroyed fishing boats until it was killed, and then the townspeople ate it. A set of activity cards includes: an exposition justifying the invasions of earth by the Martians in *War of the Worlds;* a reading by a radio announcer of one of the mystery stories; a change in the ending of *Frankenstein* to a happy one; and a card game with scenes representing various classics. Each student is expected to read and write at least one story in each category, and to be familiar with titles, authors and plots of at least 10 books.

Sharon Larkin

The Students

Ninety sixth-grade students with various levels of achievement participated this year in the program. They met three days a week for six months. The program can be used from the fourth grade on for children with a variety of achievement levels. It can be used with small or large groups.

The Staff

The program was developed and implemented by Sharon Larkin, a teacher for 17 years. It was an outgrowth of a workshop given at Hunter Elementary School. A student teacher is helpful but not essential. The program is supported by the school librarian and the administration.

Materials and Facilities

The program can be conducted in a regular classroom. A quiet listening corner can be set up in the library for small-group and individual work. Books, filmstrips, cassettes, records, filmstrip projector, tape cassette player, phonograph, headphones and a rexograph machine are required equipment. A display area for children's projects is essential.

Outside Resources

Trips to the public library are necessary.

Overall Value

The program has stimulated activities and talk, not only among the children in the school but among teachers as well. Through the use of catchy slogans, multimedia materials and a variety of exciting and colorful activities, the children's thought processes and descriptive writing skills have improved.

More Information

Sharon A. Larkin
P.S. 130
143 Baxter Street
New York, NY 10013
Telephone: 226-8072
Principal: Richard S. Kramer

Individualized Reading for Chinese Children

The Program

Individualized Reading for Chinese Children was developed to help Chinese students decode words. The program is an alteration of the *Basic Reading Series* for levels A, B, and C, published by Science Research Associates, Inc. to meet the needs of the immigrant Chinese child. These students have a difficult time associating the spelling of English words with their sounds. The first part of the program is designed to develop oral competence with the words that will be introduced. Any aspects of language that might be unfamiliar to the children are presented and discussed before they begin to learn how to read. The children should understand what they are asked to decode, because their motivation will remain high only if correct decoding yields the reward of instant meaning. The second part of the program is designed to help the children decode and discover sound-spelling relationships. It progresses from basic three-letter words of one syllable to more complex combinations of consonants and vowels.

The Students

Twenty-eight first-grade students participate in the program. All of the students are beginning readers. The class meets daily. The program can be adapted to other age groups and achievement levels.

The Staff

Gattlen Lee, a first-grade teacher for three years, developed this individualized reading program. A part-time paraprofessional is also involved in actually running it.

Materials and Facilities

The materials consist of basal reading series readers and workbooks, and teacher-made materials such as flash cards, fill-in-the-missing-word cards, and unscramble-the-words cards.

Outside Resources

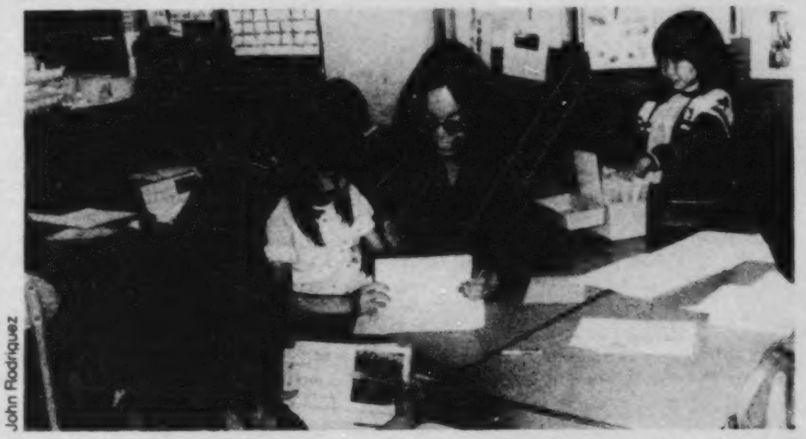
None is needed.

Overall Value

The program increases the motivation for learning the skill of decoding. The child encounters the unusual and nonconforming patterns of English spelling with fewer problems because she or he is secure in the knowledge of the most common and reliable features of the written language. Because the program is individualized, it lets children work at their own pace and teaches them to be more responsible. It also motivates them to complete the present level at which they are working and move on to the next.

More Information

Gattlen Lee
P.S. 2
122 Henry Street
New York, NY 10002
Telephone: 964-0351
Principal: David Fong



John Rodriguez

Make a Magazine

The Program

Make a Magazine uses the hands-on production of a school publication to motivate the improvement of communication skills in fourth- and fifth-grade students. Twenty children meet as a Journalism Club once a week for 45 minutes during the school day. The first meetings are used to discuss the possibility of producing a school magazine and to review magazines from other schools. Students make outlines of the type of material to be included in their magazine, using the other magazines as guides. Next, some children volunteer to cover various school activities, review assembly programs, report on class trips and interview visiting dignitaries and outstanding school personnel. Others are asked to collect news from their classmates. Several club sessions are spent reviewing the techniques of interviewing and reporting. Headlines are written at another meeting. Then, all contributions are typed by an adult volunteer and copied several times, so that all the children have the experience of organizing layouts and paste-ups.

The final 10-page format is mimeographed in the publishing activity center. Children take turns operating the electronic stencil cutter and the mimeograph. They use the laminator for the front cover. The 10 pages are then collated and bound with a spiral binding in a manual machine that only the strongest students can operate. The last job is distribution. The class not only "makes a magazine" but has 500 copies of it and everyone in P.S 116, from kindergarten to fifth grade, receives one. Sequenced outlines and a teacher's bibliography are available. Also, some advice from developer Joan McCormack: "Go for something less than five hundred copies."

The Students

Twenty students in the fourth and fifth grades participated. Most of the students were reading on grade level. The program could easily be adapted to older children but not to larger groups. For the students to enjoy the hands-on experience from conception to final product, small numbers are imperative.

The Staff

Three years ago, the principal of P.S. 116 initiated a school club program as an important enrichment activity for children in an economically deprived neighborhood. Because of what parents considered a dangerous environment, many children were not allowed out after school and activities like scouting and community sports were denied them. McCormack was asked to develop a program in journalism for one club. McCormack had five years' experience as a language arts cluster teacher, and the previous year had incorporated the children's work into a magazine. The program is implemented by the teacher alone, but she enjoys the support of the administration, which is necessary to the program.

Materials and Facilities

The school library is the ideal place for most meetings. The large tables facilitate informal discussion and provide work space for layouts and paste-ups. Reference books are handy if needed. Because McCormack has use of a publishing activity center, the actual production takes place there. The magazine, however, could also be brought to the paste-up stage and then reproduced by school aides or commercial means.

Outside Resources

The school schedule did not allow for trips, but the program would benefit from a tour of a local print shop and/or a small newspaper.

Overall Value

"The children gain a sense of accomplishment far exceeding the amount of time spent on the project," according to McCormack. "The principal and the parents were delighted with the magazine," she says, "and reinforced the children's pride in themselves and in their product. And I still enjoy their sustained interest in all writing assignments. I see this interest every day in the question: 'Will you put this in the magazine?' Furthermore, many of the children who once resented the need to critically reread and correct and rewrite their own work now accept this as a necessary step to publication. But most importantly, they learn to work as a group, often doing a dull job while waiting their turn to do the more exciting things. Making a magazine is a socially as well as educationally enriching experience."

More Information

Joan McCormack
P.S. 116
107-25 Wren Place
Jamaica, NY 11433
Telephone: 526-4884
Principal: Elaine A. Davis

The Making of an Animated Cartoon:
Creating a Story Without Words

The Program

The Making of an Animated Cartoon is a program designed to encourage children to create, and then animate, an original drama, relying solely on the visual power of characters and scenes to communicate the story. Students first engage in pre-cartoon animation activities, creating and completing portions of filmstrips, making flip sheets and flip books, and designing thaumatropes. Then they create the story for their cartoon, draw the scenes on cards, and order the cards on a storyboard. Characters and scenery are made out of paper, and the students finally film the cartoon. The teacher assists, if necessary, by clarifying how movement in the cartoon is achieved, or by suggesting ways to simplify story plots or produce a given effect.

The Students

Sixteen second-graders of all abilities participated in the program this year. An average of four or five hours of students' independent work time is spent on each cartoon, from the conception of an idea to its eventual filming. The pre-cartoon activities take approximately three hours. From past experience, this program could be easily adapted for children of all abilities in grades one to five. Since each cartoon is the effort of two to four students, class size could be larger.

The Staff

Teachers Nancy Shuller and Jon Scieszka jointly developed and implemented the program, with administrative support. Shuller has taught grades two to seven, has been involved in teacher education at Hunter College, and has created and published curriculum materials. Scieszka is a self-taught animation authority who has taught first through third grade, published several magazine articles and short stories, and recently collaborated on a clay animation film. The program could be implemented without staff support, although assistance during the filming is most desirable.

Materials and Facilities

No special room or setup is required, although it is highly desirable, during the filming of the cartoon, to have present only those students whose cartoon is being filmed. Distractions can easily ruin such work. Necessary equipment includes an 8mm movie camera and projector, tripod and film. Materials needed are two-by-three-foot posterboards for the storyboards, four-by-six-inch cards for the scenes on the storyboard, and construction paper. Cut pieces of white paper are needed for the flip sheets and flip books, and a prepared worksheet is needed for frame completion. Commercially prepared flip books are available as models. Most of the instructional materials are either models for the students' own work—the flip sheets, flip books, and thaumatropes—or storyboards and cards needed later to create their cartoon.

Outside Resources

An advertising company, or similar firm, employing a student's parent is a big asset and can give students greater insight into animation. A source for pre-cartoon activities is *Animation*, An Action Book from Network, Hutchinson, London, 1975.

Overall Value

Stories are communicated daily through speech and the written word. Cartoon-making provides children of all abilities with the unique and challenging opportunity to develop a story in which all actions and feelings must be conveyed without words. A cooperative spirit is enhanced as members work toward the development of one story.

Jon Scieszka

More Information

Jon Scieszka and Nancy Shuller
The Day School
4 East 90th Street
New York, NY 10028
Telephone: 369-8040
Principal: John Dexter

Multi-level Spelling

Joanna Uhry

The Program

Multi-level Spelling, designed for use with inter-age classes, is a program that incorporates spelling rules, vowel patterns and weekly reviews. Each lesson includes purely phonetic words (green light words), words which can be spelled by using rules (yellow light words), and words which must be memorized (red light words). The entire class participates in group lessons for learning the week's concept or rule. Within this framework, students in different grades, or at different spelling levels, learn different word lists.

Rules and spellings are reinforced informally through the use of games and multisensory teaching techniques. Children of different ages help each other because they all learn the same rules. In addition to a study sheet which contains their list of words, students are given weekly worksheets for use at school and/or at home. The worksheets contain exercises to reinforce the week's rule, a review page for the previous week's rule, a Cloze exercise using the words from the week's vowel pattern, a writing assignment using spelling words, and a review page incorporating a mixture of past rules, particularly those for adding suffixes.

Each year the previous year's words are reviewed, more complex words are learned and the 20 basic spelling rules are reviewed.

The Students

Approximately 65 students have participated in *Multi-level Spelling* during each of its two years. Students' spelling achievement is at or above average, using independent school norms. The program has been particularly successful with both gifted and learning-disabled students because of its flexibility in matching students' abilities with the appropriate word lists, while encouraging these children to be part of the group during lessons and games. The formal aspects of the program are taught in two 20-minute sessions a week, but the rules and patterns are constantly reinforced through both games and written work.

The Staff

The program was developed and field tested by Barbara Thompson and Joanna Uhry at The Calhoun School. Both have taught for about 10 years in a variety of situations. Both have masters degrees in education, with additional course work in reading and learning disabilities. The program has been supported by Calhoun's administration through the awarding of a grant to enlarge and refine the materials over the summer.

Materials and Facilities

Multi-level Spelling is based on words chosen from standardized graded word lists and from existing lists of spelling rules. Particularly useful books are: Forbes, Celeste T. *Graded and Classified Spelling Lists for Teachers.* Cambridge, 1968; Childs, Sally B. and Ralph de S. *The Childs Spelling System: The Rules*. Cambridge, 1973; Traub, Nina. *Recipe for Reading*. Cambridge, 1975.
It is necessary to have a ditto machine to duplicate the weekly practice materials.

Outside Resources

Any field trips or life experiences that inspire writing can be used to strengthen spelling.

Overall Value

Say the developers: "The program has raised the scores of students on standardized tests and improved the quality of spontaneous writing. It's easier for teachers to administer within an inter-age classroom than the traditional programs we've used. And *Multi-level Spelling* combines the benefit of the informal, social, interactive learning of inter-age classes with a systematic and rigorous approach to skills."

More Information

Barbara Thompson and
Joanna Uhry
The Calhoun School
433 West End Avenue
New York, NY 10024
Telephone: 724-1980
Head of School: Neen Hunt

Pencil Points Unlimited

The Program

In *Pencil Points Unlimited*, a writing skills program, students engage in daily or weekly writing of an expository and creative nature. The program's purpose is to inspire and encourage appreciation for literature and creativity in writing; to engender improved reading and language skills; to utilize, refine and elaborate feedback procedures, and to foster individual and collaborative efforts toward academic and social growth, through a continuum of coordinated communication arts experience.

Emphasis is on both formal reporting and self-expression through interdisciplinary subject selections. The students produce journals, essays, articles, plays, poetry and interviews. These writing exercises are integrated with such multimedia extensions as puppetry, mural painting, books or cassette tape production and news broadcasting. The program also features peer-group interaction, teacher-student feedback procedures and student progress assessments.

The Students

Thirty-three fourth-grade students participated in the program. The achievement levels of the class were basically average to above average. The program can be adapted to other ages and grades, of any achievement level or any size.

The Staff

The program has been developed and implemented by classroom teacher Judith Rymer, who has written other proposals and evaluations. Implementation has been accomplished with the assistance of some involved parents and the support and consultation of colleagues and administrators. Although support is welcomed, and is a strong component for success, it is not essential.

Materials and Facilities

A classroom with flexible seating and work space is adequate, but supplementary spaces are suggested for quiet review and research as well as library time. Materials and equipment such as books, paper, a duplicating machine, a cassette tape recorder and cameras are needed. Simpler or alternative methods may be sought to implement fundamental aspects of the program.

Outside Resources

Activities outside the school include field trips to local public libraries, a theater, a newspaper printing shop and a television studio. There were classroom visits by local writers and actors.

Overall Value

In addition to refining or improving the students' writing skills, this program extends, expands and stretches their imagination. The children's social experiences grow through peer interaction as they critique each other's writings. The students develop confidence, self-esteem and a sense of acceptance as a result of writing and sharing their personal thoughts and feelings with classmates.

More Information

Judith Rymer
P.S. 143
34-74 113th Street
Corona, NY 11368
Telephone: 429-5700
Principal: Thomas Rooney

RAIN

Nature brings rain
Almost every week.
Some of us cuddle
Up and go straight
To sleep.

Dania Diaz

Play-Writes Incorporated

The Program

Play-Writes Incorporated divides the class into several committees. Each committee selects a library book. The book is read by each member, and its adaptation as a play is discussed for setting, plot and characters. Using the encyclopedia, atlas and other reference materials, each committee researches the period covered by its book to authenticate scenery and costumes. The children write the script, and then each student is given a copy and assigned a part to play or job to perform. The script is rehearsed in the library, in the classroom and at home. When the students have mastered their parts and can read them effectively, the play is performed in the library and in the classroom. As a culminating activity, the play is made into a book. There is a cover, with a title page and copyright data. A table of contents and a glossary are included, when necessary. The students tape the story, synchronizing the tape with the book by using a bell signal. Appropriate catalog cards are prepared by the students for the book-cassette kit, and they are filed in the library's card catalog. The kit is stored with other media materials and is available for borrowing by the staff or students. Each child on the committee, by bringing in a cassette tape, can make a duplicate kit to take home for his or her personal use.

The Students

This program can be adapted for grades two and up. Reading materials can be modified to suit abilities and language difficulties. (Many of the students have English as a Second Language.) Picture and less difficult books are best suited for the second grade, for bilingual classes and for students with reading difficulties. Smaller register classes, such as the Promotional Gates classes, benefit greatly because there is more chance for student involvement.

The Staff

Caroline Townes, librarian for 18 years, implements the program in the library with or without additional aid.

Materials and Facilities

Cassette recorders, cassette tapes, and construction and duplicating paper for preparing the books are the materials used. The program is conducted for the most part in the library, being staged there, and in the classroom.

Outside Resources

The home and the public library are the two best outside resources for this program.

Overall Value

The program is interdisciplinary. Communication arts, social studies and library science are the disciplines involved. The reading, writing and oral communication of the students are improved, their library skills are reinforced, and there is a great sense of pride in taking home the multimedia kit.

More Information

Caroline Townes
P.S. 95
179-01 90th Avenue
Jamaica, NY 11432
Telephone: 739-0007
Principal: Jerome Bloom

Reading Descriptive Words through Photography

The Program

Reading Descriptive Words through Photography enriches the reading and spoken vocabulary of children in the program. When they engage in activities such as cooking, trips and performances, the teacher and their fellow-students take Polaroid pictures of what they are doing. The next step is the preparation of experience charts for the class records. In making up the chart the children quickly learn to incorporate and read words such as "terrific," "marvelous," "stupendous" and the like to describe reactions to their experiences. The program was introduced at the beginning of the school year and, as the term progressed, the children were able to read and use these positive descriptive words.

The Students

The 28 heterogeneously grouped first-graders had many opportunities to use this technique throughout the school year. The majority of the children did not have kindergarten experience.

The Staff

Suzanne Levy, a classroom teacher of early childhood education for 20 years, developed and implemented this program as an outgrowth of a classroom cooking experience. Several interested parents also participated.

Materials and Facilities

The program was implemented in a first-grade classroom in an early childhood center. The children were taught to use a Polaroid camera. Other materials needed are film, flash cubes and experience chart paper.

Outside Resources

Field trips to such places as the American Museum of Natural History, the Museum of the Native American, Alley Pond Environmental Center, the Queens Botanical Gardens and the New York Aquarium give the students a wide range of experiences.

Overall Value

"This has been rewarding for the students in their use of language," reports Levy. "The confidence the children have gained carries over to other curriculum areas. They have a positive attitude toward speaking and reading."

More Information

Suzanne Levy
P.S. 251
144-51 Arthur Street
Springfield Gardens, NY 11413
Telephone: 276-2745
Principal: Dorothy U. Moore

Vocabulary Building through Latin & Greek Etymology

The Program

This *Vocabulary Building* program is a very challenging method based on the study of Latin and Greek etymology. There are many English words that have been derived from Latin and Greek. Learning Latin and Greek roots helps students decipher the meaning of words without looking them up in the dictionary. This study also provides them with a practical introduction to historical linguistics. The study of Latin and Greek etymology can very well be integrated with the social studies curriculum, especially in the sixth grade. Students also learn and appreciate that a country's language is an important and integral part of its culture. The program involves making task cards with Latin phrases and sentences. The teacher gives the literal as well as the idiomatic translation of each Latin saying, underlines all the words with English derivatives and then elicits from the class other words with similar roots. This is done on a daily basis. (Time allotment should not exceed 15 minutes each day.) For reinforcement, students can make posters and family coats-of-arms using the Latin sayings learned in their etymology class. Some time will also be devoted to learning English words with Greek roots by making "Greek etymology trees." Samples of these can be provided upon request.

The Students

The program has been confined to the sixth-grade IGC (Intellectually Gifted Children) class at P.S. 114 during the last two years, but a teacher with or without any background in the classics can very well employ this method of vocabulary enrichment by using the task cards and sample lesson plans that can be provided.

The Staff

The staff consists of one teacher, the program developer Daniel Domingo. Domingo holds a master's degree from Hunter College in teaching English as a Second Language, and has had special training in the study of the classics. He has taught for 25 years, 12 of them in New York City public schools. He also teaches Spanish to his class at P.S. 114.

Materials and Facilities

The classroom serves as the locus for this program. Materials used include Latin and Greek books and workbooks, index cards and file boxes. Some of the books are: Pappageotes, George C. *Modern Greek in a Nutshell.* Montclair, NJ: Institute for Language Study, 1961. Pearson, et al. *First Year Latin.* New York, NY: American Book Company, 1929. Wheelock, Frederick M. *Latin: An Introductory Course Based on Ancient Authors.* New York, NY: Barnes & Noble Books, 1963.

Outside Resources

Latin and Greek books can be loaned or donated by parents, or may be borrowed from public libraries.

Overall Value

The program has produced significant improvement in students' vocabulary tests, both oral and written. Their command of the language has improved, as evidenced in their written compositions. On several occasions parents have complimented the teacher for "bringing Latin back" to the classroom.

More Information

Daniel L. Domingo
P.S. 114
Beach 135th Street and Cronston Avenue
Rockaway Park, NY 11694
Telephone: 634-3382
Principal: Arnold Wittenstein

Welcome to the World of Folklore!

The Program

In *Welcome to the World of Folklore!* students learn to understand and appreciate the folklore of many cultures by listening, reading, storytelling, dramatizing and using artistic expression. The teacher reads aloud selections from myths, legends, fairy tales, folktales and fables. Through their own experience, children recognize common elements of each form. They learn about the oral tradition of storytelling with gestures and voices. Folk music introduces the ballad form. Songs such as "Mr. Froggy Went a Courtin' " can be sung or played on recordings. Individual and group activities suitable for task cards, and arranged in order of difficulty, are used, together with a two-page bibliography.

The Students

In a gifted fourth-grade class, 36 children meet daily over a six-to eight-week period. The program is well suited to any grade between two and eight, to any size group, and to all ability levels, because of the availability of folklore at every reading level.

The Staff

The program was developed and implemented by Nina Birnbaum, a teacher of the gifted at P.S. 6M with 14 years' experience. No outside assistance is required. Although the principal supports the program, supervisory backing is unnecessary. Parents or neighborhood volunteers who share their native folklore can enrich the program.

Materials and Facilities

This program is conducted in a self-contained classroom. Supplies needed are a good classroom library, augmented by school and public library, plus children's private collections; and normal art supplies, such as drawing paper, crayons, paint, markers, index cards and file box.

Outside Resources

In the course of this program, trips were made to public libraries and to many museums to locate works of art using mythological themes. One valuable outside speaker was a college professor of classics who came to relate the story of Cyclops.

Overall Value

"Old and young enjoy the thrill of heroes, monsters, powerful gods, enchantment and magic spells," states Birnbaum. "Here is material children recognize from the world of cartoon entertainment. They are given a chance to read folklore on their own, and in the friendly circle of the classroom. Their reading material is filled with drama, charm, pathos and danger; there is something for every reader."

More Information

Nina N. Birnbaum
P.S. 6
45 East 81st Street
New York, NY 10028
Telephone: 737-9774
Principal: Jack Zuckerman

Alexandra Jacobs
4-30
....Pandora's Box.....

Alexandra Jacobs

A Working Newspaper

The Program

The development of a school newspaper provides gifted children with a diversified program of written and oral communication experiences to improve their skills. In *A Working Newspaper*, students investigate the function of a major newspaper as one type of informative literature. This is accomplished in part by analyzing the contents of copies of the New York *Daily News* twice a week. After two months of studying a real newspaper, the children begin to work on good journalism techniques. This is accomplished with teacher-made materials (i.e., rexographed student worksheets on such journalistic areas as opinion vs. fact; the five "w's"; bylines; headlines; and lead paragraphs). The students also gain experience in interviewing and photography. The objective is to produce a minimum of two school newspapers during the year. The advisor to the program is granted three additional preparation periods per week to organize and to work with individual students in refining their techniques.

The Students

This year's newspaper staff consists of 24 fifth-and sixth-graders. Last year the staff consisted of 39 sixth-grade children.

The Staff

The staff is the advisor, with support from the school administration, the Community School District 12 publications department and the district superintendent. It would be extremely difficult to implement this program without administrative assistance. Also, the district publications department helps immensely by printing one or two issues of the newspaper.

Materials and Facilities

The newspaper staff needs a classroom in which to work. The following equipment must be easily accessible: duplicating machine, newspapers, writing implements, camera and cassette recorder.

Outside Resources

A field trip to a newspaper (e.g., the New York *Daily News*) is advisable.

Overall Value

"Gifted children," says Stecker, "need a diversified program of written and oral communication to improve their skills and, at the same time, provide an educational challenge. By focusing their attention on current events, we help them to become aware of the cause-and-effect relationship between these events and their own lives. The students become increasingly aware of the need to express their thoughts succinctly, so that the listener or reader can quickly ascertain the importance of the information being relayed. Moreover, students feel a great sense of pride in achieving set goals and being of service to others."

More Information

Marcia Stecker
C.S. 47
1794 East 172nd Street
Bronx, NY 10472
Telephone: 824-0950
Principal: Ralph Rogers

Advertising

The Program

Advertising investigates all facets of the world of advertising. The students examine various forms of advertising outlets: television, radio, magazines, newspapers, posters and billboards. They then create their own ad campaigns, working from initial concept through art, copy, and storyboards to the final product. Steps in creating an ad campaign include the following: (1) create a product; (2) select a medium—radio, television, print or billboard; (3) determine the audience—singles, children, teenagers, married folks, men or women; (4) select the selling approach—jingo/slogan, testimonial, scientific, sex; (5) prepare the copy; (6) prepare the poster, video or audiotape cassette; and (7) make a formal presentation. One class created "Contact Charms" breath mints and decided to sell them to teenagers over the radio with the timeless slogan: "Make your breath breathless." The students also learn about the ways of the ad world through the use of the Scope Activity Kit, *Advertising;* the Poindexter/Osak actual ad campaign for Chardon Jeans; *What's It Like to Work in New York City;* and various teacher-made materials.

The Students

Advertising is used with one eighth-grade and four ninth-grade classes that meet four or five times a week for one term. The program has been successful with students of varying levels of ability and achievement, and can easily be adapted to similar age groups and achievement levels.

The Staff

The program was developed by Antoinette Anglisano as a unit of the course entitled "Mass Media," part of J.H.S. 126's Enrichment Program. The principal and supervising assistant principal support and encourage the program. Anglisano has experience in creative dramatics and television, and is the producer/director of a public access cable television program.

Materials and Facilities

The classes are held in an average-sized public school classroom. The school ditto machine is needed for reproducing teacher-made materials. The students use the commercial "U" film, blank cassette tapes, rolls of photographic film and the Scope Activity Kit booklets, *Advertising* (Scholastic Scope Magazine, New York, 1975).

Outside Resources

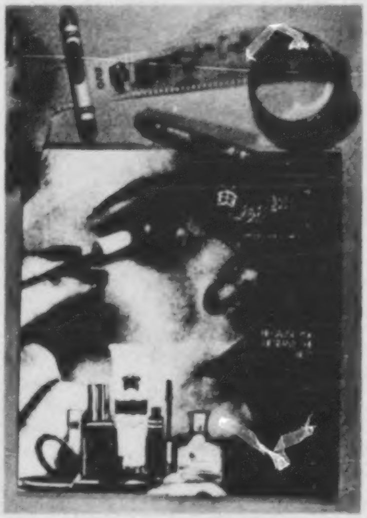
A fine resource for the students is the Museum of Broadcasting. They also study advertising in newspapers and magazines, and on radio and television; and an advertising consultant visits each class.

Overall Value

By using the prolific, changing and up-to-date world of advertising as a basis for study, students further develop listening, speaking, reading and writing skills. Advertising is something they can relate to immediately. And they become genuinely enthralled when they examine how an ad is made—and then create their own. As an extra benefit, students learn to interact in group planning, because that's how ads are made. Also, career opportunities in advertising are discussed.

More Information

Antoinette Anglisano
J.H.S. 126
424 Leonard Street
Brooklyn, NY 11222
Telephone: 782-2527
Principal: Sheldon Toback



Rachel Ericson / Photo: J.R. Schlauch

Gates Science from Space to Earth

The Program

The purpose of the program, *Gates Science from Space to Earth,* is to enable the students in these specialized Promotional Gates classes to develop a positive self-image, while emphasizing the practicality of reading and writing skills in science. This interdisciplinary approach to reading and writing helps students develop their background in scientific knowledge while cultivating patterns of clear, concise sentence structure.

Students begin by reading about the broad spectrum of order and precision in the solar system. Eventually they focus more specifically on the life-forms of Earth. This is a process that should evolve gradually through daily reading. The use of attractive models of planets and constellations, plus real plants and small animals (tropical fish, a finch or a guinea pig might be used), increases the student's appreciation for life processes while cultivating his or her visual perception, motor coordination and imagination.

Specific reading objectives, creative writing sheets and guided science lessons help students learn to gather information, locate main ideas, follow directions, develop a sequence of events, draw conclusions and make implicit and inferential judgments. Projects are an integral part of this program and should include miniature solar systems, poetry constellation posters and multi-shaped word kites.

As the program progresses, students gain a deeper appreciation of simpler life forms by growing their own plants from bulbs, stems, roots and cuttings. These projects give students a better understanding of nature. In time, students study more complex life forms through comprehensive reading selections with challenging vocabulary. In many instances self-expectations and self-images rise while reading scores automatically improve. As a concluding project, students develop their own "bestiary" (half-animal, half-human imaginative drawings). To make these creatures come to life, students write personified biographies about each of them. These fanciful caricatures may be made into talking illustrations or puppets for use in choral recitation, dialogue-drama or comedy and other speaking activities.

The Students

There were 17 seventh-grade Promotional Gates students of below average reading level when the program began. In the mid-year reading tests, nine students demonstrated marked improvement in their scores and were promoted. This left eight students for the second term's activities. Since the program is quite flexible, it was easily adjusted to the varying reading levels and changing class size.

The Staff

Rose M. Boccasino, a Promotional Gates teacher with an extensive background in communication arts and remedial reading, developed this program with the full support of the communication arts and science chairpersons as well as the principal. This type of support is helpful because of the interdisciplinary nature of the program.

Materials and Facilities

Classroom corners can be utilized for different projects. For example, a table can be set up for models and students' three-dimensional projects. The classroom or hall walls and bulletin boards can be utilized for writing assignments. Ceilings and fixtures can be used for suspending mobiles and luminous constellation projects. Another corner should have a table with natural or proper artificial lighting for plants, and space for tropical fish or some other small animal project. A duplicating machine and an overhead projector are helpful but not absolutely necessary. Any other materials will depend on the plant or animal project that is selected.

Outside Resources

If possible, trips to local planetariums, botanical gardens and zoos are worthwhile and add an extra dimension to the program.

Overall Value

"Promotional Gates students, like many students today, are not motivated to read or write," Boccasino observes, "There are many reasons for this lack of motivation, one being a poor self-image reinforced by repeated failures. This program is designed to attack this problem by involving the student in successful projects that lead to a positive self-image. Teenageers are naturally attracted to stars, zodiac signs, plants and animals. Studying the universe helps them define more clearly and appreciate more fully various life forms and methods of environmental preservation. Eventually, students gain a better understanding of who they are and what they can contribute to their families, schools and community."

More Information

Rose M. Boccasino
J.H.S. 49
101 Warren Street
Staten Island, NY 10304
Telephone: 727-6040
Principal: Bertram J. Levinson

Gender Stereotyping in Literature

The Program

Students develop a critical awareness of gender stereotyping by examining and analyzing different attitudes towards the way men and women and boys and girls are depicted in literature. They examine roles and guidelines for behavior that are instilled in everyone from an early age. They explore and clarify and reevaluate their own values and preferences. Sexism in the media, in career opportunities and in behavioral expectations is also explored. Books are chosen, not only to stimulate discussion of varied roles and behaviors that are available to both males and females but also to help the students overcome commonly held myths that limit their intellectual and emotional growth. Students take part in a variety of activities including interviewing, researching, reporting and role playing. Textbooks, library books, newspapers and magazine articles, films, cassette recordings, guest speakers and impersonations of famous women in literature are used in the classroom.

The Students

The students who participate in the program are seventh-graders of average and above-average achievement levels. The program can be adapted to any age group, achievement level and group size.

The Staff

This program is the result of an outreach project co-sponsored by the Feminist Press and the New York City Public Schools. Strategies and curriculum ideas were presented and discussed at three workshops. However, the final curriculum formulation and implementation were primarily developed by Donna Turian, with the counsel of Marion Byers, librarian, and the cooperation of Laurie Johnson, co-director of the project.

Materials and Facilities

The program is classroom based, and a variety of "non-sexist" books should be provided. A list of these books is available upon request. The school library is a source of other reference material. A motion picture projector, cassette recorder, the daily newspaper and duplicated teacher-made materials are needed.

Outside Resources

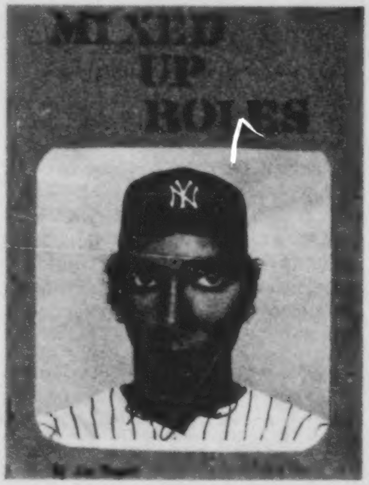
Guest speakers can enhance the project's effectiveness.

Overall Value

This program helps students to clarify, analyze and reevaluate their own values relating to sexism. By the program's end, students should be better equipped to utilize their own resources and to achieve sought-after goals in a society that offers a myriad of permutations, combinations and possibilities.

More Information

Donna Turian
I.S. 74
61-15 Oceania Street
Bayside, NY 11364
Telephone: 224-8423
Principal: Irving Kamil



Lisa Pappert

Introduction to Newspaper Production Techniques

The Program

Introduction to Newspaper Production Techniques, a three-week course in journalism, gives students a basic working news vocabulary through the organization, production, and printing of a newspaper. The program provides an insight into actual journalistic and related experience, and this motivates students to join other established publications within the school. The class is first exposed to the various forms of newspapers and a basic press vocabulary. Students then establish their paper's philosophy, format and style of reporting. Students are elected to editorial and other staff positions. Talents and interests dictate how fast the teacher expands vocabulary, outside reading, rewriting and group size. The teacher leads students through pertinent areas as the project moves toward the "deadline." Copy is blue-penciled and half-tones are cropped. Reporters cover their beats; editors lay out and shape the dummy until it becomes a mechanical and goes to bed. The classroom becomes a real-life newspaper office in which the teacher controls paperwork, routine, frustrations and overtime. And finally comes individual and group exhilaration at seeing the product take shape as the students' own. This training gives average students the confidence to feel that they can be part of a newspaper staff and, accordingly, take assignments on a future publication.

The Students

The journalism program is fitted into the regular eighth-grade English class schedule that includes listening, speaking, reading, and writing. Student writing skills vary, so this introductory course is designed for the beginner. It offers new skills to students by initiating existing newspaper styles. Mistakes become the norm rather than the exception, and students help each other correct them. One English teacher runs the class, as students work in small clusters on their separate pages. The teacher and editor-in-chief, along with the page editors, coordinate the structure. The photography club, with its darkroom experience, can be an immense help.

The Staff

The journalism program was developed by Edward H. Letteron, a teacher of English in the seventh and eighth grades at Kew-Forest School for 15 years. There, as a newspaper advisor, he saw a need for establishing journalistic fundamentals before an upperclass student could be an effective addition to the staff of the school's publications. On-the-job training took too long, and Letteron evolved his own program over a nine-year period. It began as a class discussion of what a newspaper was. It has become a training ground for the upper-school journalism class and various school publications.

Materials and Facilities

The journalism minicourse can be conducted in its entirety in a classroom, with bulletin boards displaying various newspaper formats and journalistic materials. If a school darkroom is not available, students often improvise with Polaroids or newspaper and magazine photographs. Duplication equipment is needed.

Outside Resources

Journalism students have visited newspapers and photo labs. They have heard a diverse range of visiting journalists: reporters, columnists, magazine and book editors, and foreign correspondents working here. Speakers have included *Daily News* columnist Jimmy Breslin; *Sports Illustrated* editor Robert Creamer; *Newsweek* columnist Vitari Vittachi; English newspaper columnist and correspondent Joyce Longmire; *Quick* magazine (Germany) correspondent Jean King; *New York Times* reporter Glenn Fowler; and *Daily News* editor Earl King. Personal contacts and public relations departments of news organizations may also be approached.

Overall Value

A training for journalism prepares students for the common terminology and techniques used throughout publications and other communication media. Writing skills sharpened on a newspaper carry over to all expository writing. Leadership and group participation develop through the project, and an immediate interest in the school publications becomes apparent. The program thus establishes a direct link to the journalism class and regular publications. Says Letteron: "Those with their appetites whetted by a small taste of journalism have gone on to be editors and leaders on a higher level."

More Information

Edward H. Letteron
Kew-Forest School
119-17 Union Turnpike
Forest Hills, NY 11375
Telephone: 268-4687
Principal: Philip V. Rogers, Jr.

Literature and Filmstrips (LAFS)

The Program

Literature and Filmstrips (LAFS) uses a combination of media and uninterrupted sustained silent reading to teach students to explore and analyze the many facets of literature. Students read books every day during sustained silent reading (30 minutes per day). As they read, they maintain a profile that enables them to summarize important aspects of the book. The summary includes brief statements about theme, characters, setting and mood, plot, style, genre and language (author's word choice). They then create their own filmstrips, either with captions or sound, based upon the books they have selected from the classroom library. If the objective of the filmstrip is to identify the ways in which authors present characters, students illustrate their understanding of the characters in their books by discussing the character traits and portraying them visually. To do this, they create a storyboard (using approximately 24 frames) that can be filmed. Sets varying from small dioramas to elaborate designs are frequently used, and sketches, puppets, and/or other students portray characters in the filmstrips. Using a tape recorder, students produce scripts and add sound effects to their filmstrips. On Film Day, the filmstrips are shown. The filmmakers and the other class members evaluate the filmstrips.

The Students

Sixty students of varying abilities, from grades seven through nine, participated last year, 20 students per grade. The students met for five 40-minute periods per week in their communication arts classes. This program can be adapted for both large- and small-group work. Groups can produce collaborative filmstrips, even designating titles for members of the group (director, producer, cameraperson, set designer, writer, narrator and sound engineer).

The Staff

Marc Salzman, communication arts/media teacher at the Sports School, developed and implements the program. He has the support of the administration and his colleagues. The program can be implemented without additional personnel.

Materials and Facilities

A regular classroom with movable desks is used. The following materials are needed to implement the program: Kodak Ektagraphic Visualmaker (This kit contains Kodak Instamatic Camera, two copy stands, storage area and case.); a cassette recorder with microphone, if sound is desired; a slide (or filmstrip) projector and screen; 20-exposure cartridges and flash cubes for camera; processing for film cartridges; books; white drawing paper, magic markers, rulers, pencils; press type (for lettering); and audio cassettes. For a less elaborate production, the cassette recorder can be eliminated. If students are unable to use a camera, they can sketch their storyboards and the teacher can photograph the boards. Salzman has developed instructional materials that can be used in making filmstrips an effective medium for learning how to critique literature. A glossary of literary terms, with specific examples, is useful for both teacher and student. An evaluation checklist is also used for assessing the student's works. The following titles may serve as reference sources: *Classroom Projects Using Photography,* Part I and Part II, Kodak Publication No. ED11-1, Eastman Kodak Company, 1975, Rochester, NY 14650; *Doing the Media: A Portfolio of Activities and Resources,* The Center for Understanding Media, 1972, 267 West 25th Street, New York, NY 10001; and Morrow, James, and Suid, Murry, *Media & Kids,* Hayden Book Company, Inc., Rochelle Park, NJ, 1977.

Outside Resources

Students run a school store to raise funds for purchasing and processing film. Filmmakers are invited into the classroom as guest speakers. Students attend movies based upon books and observe these films with a critical eye. They also visit photographic exhibitions at such sites as the International Center for photography and the Nikon Gallery.

Overall Value

"I could not believe how fast or how well students started to read books," says Salzman. "If they didn't understand a particular concept while reading the book, they went back to check their facts. The idea of creating filmstrips has motivated them to read, discuss, interpret and demonstrate their understanding of a book. They actually want to learn new aspects of literature so they can design more elaborate filmstrips. They learn from each other and feel very good about themselves, because they are successful."

More Information

Marc Salzman
Sports School
315 East 113th Street
New York, NY 10029
Telephone: 860-6008
Principal: John Elwell

Writing Shop

The Program

In *Writing Shop*, language arts skills are taught daily through a page of writing and a strictly individualized, self-correcting technique. Students are given a one-word topic ("angry," "scared," "street," "mother") and told to write one full page about it. While they are writing, the teacher circulates and points out, on a one-to-one basis, a minimum of two errors on each page-in-progress, selected on the basis of individual student need. The student is not told what exactly is wrong but led to discover it alone. Extensive use is made of analytic and synthetic phonics. For example, the teacher sees "Payed" on a paper and questions the use of the capital P, reminding the student of the rules of capitalization. Next, teacher asks student to write the word "said." If it is done correctly, the teacher will instruct the student to match "paid" with "said." If it is done incorrectly ("sayed") teacher will ask for "say," request the student to sound out the "d" and add it on ("sayd"), then invoke the spelling rule for "y" turning into "i" when a suffix is added, and elicit "said." In this instance, two important spelling rules have been reviewed and a correct spelling has been obtained.

A backup program of minilessons, quizzes, worksheets and dictations, designed for whole-class use, allows the teacher to assign homework and grades. Lists of frequently used words are a source of spelling analogies when working out needed corrections. Minilessons deal with topics like doubling the consonant (get/getting), dropping the silent "e" (write/writing), the use of the apostrophe or the correct use of their/there/they're.

The only way a child can fail is by not turning in the daily pages. No matter how poor the performance on the quizzes, the student is entitled to a passing grade of 65, provided a page on every topic assigned within the marking period has been handed in. The work must be made up if the student is absent. The 65 may be raised on the basis of grades obtained on quizzes and worksheets, and as a result of an evaluation of the quality and content of the writing. This grading philosophy enables the most deficient child to pass the course by completing the assigned task.

The Students

In the past year, 60 students in grades seven through nine met three times weekly, in classes not exceeding 20. Larger groups may be accommodated if the number of errors corrected is reduced to one per paper, or if paraprofessional help is made available. In addition, the nature of *Writing Shop* is such that it provides an appropriate setting for children who are attempting to return to the "mainstream" from special education.

The Staff

Writing Shop was developed by Naomi Levinson in 1968. It was used in the demonstration district of Ocean Hill-Brownsville at I.S. 55. An important factor in its success is the support of the administration—principal, alternative school director and dean. Such support is essential, as a structure must be provided to ensure that the students will complete the required task on a daily basis. A supervised study period and/or a system of after-school detention have proven useful.

Materials and Facilities

Funds are needed for the end-term production of an *Anthology of Student Writing*, distributed to students and staff. This anthology is an excellent source of reading material for remedial students; tapes can be made from it for the teaching of listening comprehension skills.

Outside Resources

Outside resources are not a necessity; however, field trips often provide an impetus for the writing.

Overall Value

"This is a very simple but powerful program," says Levinson, "that fosters creativity while turning students into fluent, relaxed writers, providing them with an outlet for feelings and a vehicle for self-expression. At the same time, the self-correcting procedure trains them to take responsibility for proofreading." *Writing Shop* also raises their self-esteem by proving to them (and their teachers) how much they can accomplish. Improved retention and carryover result from the fact that the teaching is always in context and related to the child's personal writing. Another major benefit of this program is that it allows the teacher to individualize instruction, enabling him or her to function comfortably with even the most heterogeneous groupings.

More Information

Naomi Levinson
Sports School
315 East 113th Street
New York, NY 10029
Telephone: 860-6008
Principal: John Elwell

Communication Skills through Television

The Program

Students at August Martin High School can take *Communication Skills through Television* production classes for English and speech credit. The television classes, which meet in the color television studio, seek to motivate the students to improve writing, reading, speaking and listening skills by having them work on news programs, interviews, commercials, dramas, documentaries and variety shows. These classes are highly activity-oriented, and students are encouraged to learn by doing. What is unique about the program is the instant feedback—the students' performances are rehearsed, taped and replayed. Students actually *see* and *hear* their errors. Poor diction, grammar, and appearance, and lack of preparation, clearly show. Performances are written about and discussed by the students' peers. In addition to improved cognitive skills, the creative atmosphere is more conducive to learning, and both students and teachers have a more positive attitude. Attendance and behavior also show improvement. Course outlines and a thorough curriculum have been developed and are available for teachers interested in replicating the program. In addition, sample tapes are also available.

The Students

Five hundred tenth-, eleventh-, and twelfth-graders took television classes last term. The students' achievement level was average. The classes meet five days a week. The program can be adapted to other age groups and other levels of achievement. It can be carried out with larger or smaller groups (average size: 30 students), though smaller ones are preferable. The ten-week course is taught four times a year.

The Staff

The August Martin television studio was set up with the assistance of a grant from the Aviation Development Council. The curriculum development and teacher training team was directed by Dr. Jacob B. Zack, Victor Herbert and Stevan Peters. Peters is the present communications coordinator. Teachers from various departments teach in the studio. A paraprofessional is in charge of running the studio and assists in the classroom. The administration of this school is extremely supportive, but a modified program could also be developed and implemented without support.

Materials and Facilities

August Martin High School has a complete color television studio with cameras, videotape machines and special effects generator. Although videotape equipment is preferable for such a program, it could be carried out with simple sound recording equipment. The program can be tailored to each school's facilities. Textbooks used include: *The World of Communications* (McKnight Publishing Company); *Exploring Television* (Loyola University Press); *Critical Television Viewing* (Cambridge Press); *Television Production Handbook* (Zettl, Wadsworth Publishing); and *The Television Program* (Hill and Wang).

Outside Resources

The television classes take regular trips to Channel 4, 5 and 11. Numerous speakers from industry, colleges and the communications field visit often and speak to the students. In cooperation with the Career Bridges Program, many of the students are placed in part-time jobs at Channel 5, Channel 31, HBO, Manhattan Cable and Western Electric Photo Lab.

Overall Value

In a world where television and the visual arts play such an important role, the potential of using television and videotape recorders to improve skills is limitless. Students in this program are encouraged and motivated to improve their writing and reading skills. More often than not, they are eager to work and find the television classes very stimulating. Because of this positive attitude in the classroom, other teachers will want to adapt this program for their own use.

More Information

Robert Gross
August Martin H.S.
156-10 Baisley Boulevard
Jamaica, NY 11434
Telephone: 528-2920
Principal: Lawrence Costello

Do and Tell

The Program

Do and Tell provides experience for speech- and language-impaired children by taking photographs of simple actions involved in daily living and in the use of communication skills and then exploring the pictures carefully. It is based on Bloom and Lahey's concept that language is a "code" in which ideas about the world are represented by an arbitrary set of signals for communication. This code can only operate in relation to what the speaker knows about the objects and events in the environment. For example: program developer Lisa Arian takes a series of photographs of the students washing hands. She will photograph the child's hands when they're dirty; the child walking down the hall to the lavatory, opening the lavatory door, and standing at the sink lathering, rinsing and drying his or her hands. With this series of photos, several concepts or skills are taught: "before and after" (Show me the photo of hands *before* washing.); articulation skills (The "S" sound is developed with *soap* and *sink*, the "sh" sound with *washing*.); the concept of action (Show me action photographs—walking down hall, opening door, lathering hands.).

The Students

The students who participate are from the School for Language and Hearing Impaired Children. They meet formally with the teacher two or three times a week for 30 minutes each session. Informal meetings occur at breakfast, lunch and during preparation periods. The program is administered in both individual and group settings.

The Staff

Lisa Arian has been a speech improvement teacher for six years and has taught in a variety of special education programs. This program has been supported by all educational disciplines, from the principal to the coordinator to the speech supervisor to the classroom teacher. Other students in the school are also included, as they are often a part of the direct activity or environment.

Materials and Facilities

Do and Tell uses instant cameras and materials found in daily living skills. For example, a toothbrush and toothpaste might be used to express spatial concepts. Portable objects commonly found in homes are also incorporated; the child's daily school and home environment provide the facilities. Published materials and teacher-produced worksheets are combined with the actual results of the photography.

Outside Resources

Any field trip or new experience for the child (e.g., seeing a movie or buying chocolate pudding) constitutes the outside resources needed for this program. Parents are a valuable resource. Not only do they provide new experiences, but they can be instructed on how to provide a new language-based skill, such as the steps involved in baking a cake.

Overall Value

This program allows the children to begin at their current level and provides the experiences and teaching materials to take them to the next level of development. Since children generally talk about what they are doing or about to do, the accompanying language concepts are internalized. It also allows the parents to become involved on a daily basis with their child's language development. Both parents and the children share the positive rewards of participation and growth.

More Information

Lisa D. Arian
P.S. 274-Speech Services Unit
800 Bushwick Avenue
Brooklyn, NY 11221
Telephone: 574-0273, 4
Principal: Juan Martinez

Electronic Speech & Language Communication Center

The Program

The *Electronic Speech and Language Communication Center* is a program designed to instruct, remediate and enrich the education of students who have speech and language difficulties. The areas concentrated on in the center are articulation, auditory processing and fluency skills. The student listens to individually prepared, teacher-made tapes (covering such subjects as phonetic placement, articulation and fluency), and in many instances is instructed to answer questions orally or to participate by speaking into the tape recorder. The student then plays back his or her tape for self-evaluation.

The auditory processing tapes stress vocabulary usage, recall, memory, making inferences and distinguishing between fact and opinion. The students using the fluency program are instructed in the "air flow technique" developed by Martin Schwartz. The students, using both tape player and recorder, learn, review and practice increased fluency on various levels of difficulty. Through the use of auxiliary jacks, the student's tape machine records both the responses and the instructions from the "model" tape. The articulation program is similar in design to the fluency section. The student interacts with the two machines as he or she reinforces articulatory accuracy on a specific target sound.

The Students

Twenty-two students in grades six through eight, who attend the speech resource center, participate in this program. The group represents students from regular grades whose classes range from the Promotional Gates program to the "SP" program.

The Staff

The program was developed by Neil Levinsky, a speech and language therapist with the Speech Services Unit since 1974. The school administration, as well as the supervisory staff of the Speech Unit, supports the program. However, the program can be implemented without support.

Materials and Facilities

Two tape recorders are set up in a corner of the speech center classroom. (Tape players and headphones are available, free of charge, from the Library for the Blind and Physically Handicapped to those classes with eligible students.) Each student is provided with a cassette tape. Additional cassettes are necessary for the instructional tapes. The student listens to the tape through headphones, without disturbing the other students in the room. A bibliography includes: D'Amelio, Possler, Ulrich. *Reading for Comprehension-Book H.*, Elizabethtown, PA: Continental Press, Inc., 1980. Flowers, Ann. *The Big Book of Language Through Sounds.* Danville, IL: The Interstate Printers and Publishers Inc., 1972. Schwartz, Martin. *Stuttering Solved.* New York, NY: McGraw-Hill Book Company, 1977.

Outside Resources

No outside resources are necessary.

Overall Value

The *Electronic Speech and Language Communication Center* offers a motivating adaptation of traditional speech and language therapy techniques. It allows for individualized instruction within a group setting. Since the inception of this program, many students have exhibited enthusiastic attitudes toward the speech therapy program. It fosters self-confidence and a sense of achievement by providing immediate feedback and reward. The program provides a high-interest, alternative method by which these students can develop their speech and language skills. This approach can be adapted for use in the regular classroom in many curriculum areas.

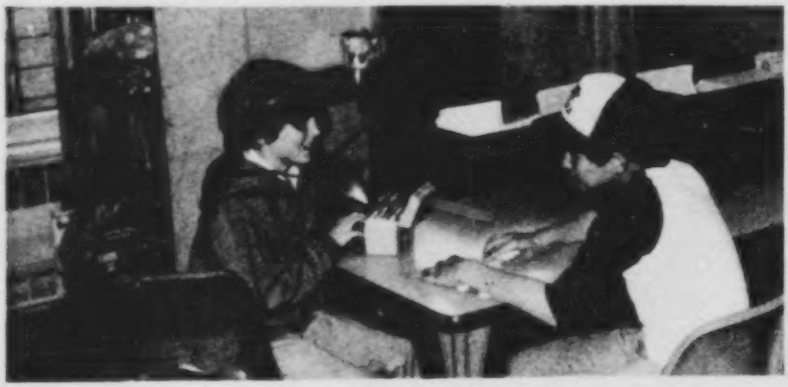
More Information

Neil Levinsky
I.S. 227
6500 Sixteenth Avenue
Brooklyn, NY 11204
Telephone: 256-8218
Principal: Donald Del Seni

Get Your Word Boxes, Please!

The Program

Get Your Word Boxes, Please! is a program designed to aid students who are deficient in basic reading and language skills by using word boxes. The program involves the tutoring of a child who is having difficulties in reading, vocabulary and/or spelling by another slightly older or more capable student, with a minimum of teacher input. Each student who is being tutored has an individual word box that can be decorated. It contains spelling, reading and vocabulary words, one word per card. Each student's words are individualized (i.e., They are taken from his or her writing or oral reading, or from words that the child requests.). The words are then put in the front of the box and taught to the student by the peer tutor. The words are reviewed approximately twice a week with the tutor, for about 15 minutes a session. If the student recognizes a word, spells it (in written form), or gives its meaning and uses it in a sentence on the first try, the child gets a check on the back of the card. When there are three checks on three separate days, the card goes to the back of the word box. When the student has 50 words in the back, the teacher administers a 50-word test. A small reward is given for passing the test (a sticker, a complimentary note to a parent, a few minutes of "free" time). The cards are filed alphabetically and taken out for periodic reviews. If a word is missed, it is returned to the front of the box and the process is repeated. At the end of the year, the students take home their filled word boxes. Peer tutors can be chosen from other classes, or children from the same class can be paired according to skill levels. The tutor need not be an excellent reader, but should have some advantage in reading skills over the child being tutored. Peer tutors need to be trained by the teacher at the beginning of the program. They are shown a method for presenting each type of word and are taught phrases to be used to reinforce student recall. A videotape of current sessions is presently being made to provide a model of good tutoring procedures. Also, many teacher-made reinforcement games have been developed that can be played by the peer tutor and the student.



Debbie Zlotowitz

The Students

Twenty students with learning disabilities, ages nine through thirteen, have participated in this program for the past two years. All students were behind from two to five grade levels in reading.

The Staff

Debbie Zlotowitz and Stacy Miller, both learning disabilities teachers, have been using this program with the cooperation of other teachers in the school.

Materials and Facilities

Each student needs a supply of three-by-five index cards, an individual index card box and alphabet dividers. Stickers are extra and help the child individualize his or her file box.

Outside Resources

No outside resources are needed.

Overall Value

"Both the child being tutored and the tutor profit immensely from the experience," says developer Zlotowitz. "The former acquires and retains a number of words (an average of 150) that the teacher would not have had time to teach. The tutor acquires a sense of self-confidence and accomplishment. The tutor's reading skills are also reinforced and increased."

More Information

Debbie Zlotowitz
The Churchill School
22 East 95th Street
New York, NY 10028
Telephone: 722-0610
Principal: Mary Newmann

Individualized Support Services

The Program

Individualized Support Services through audio textbook tapes* enables reading- and learning-disabled resource room students to work independently in their assigned subject area textbooks. Students listen to tapes of works recorded by program developer Paul Nicolardi (e.g., Arthur Miller's *The Crucible*, and *Exploring the Non-Western World*). They read along with the tapes, working at their own pace, individually and independently, to complete homework assignments and study in their textbooks. Students choose to listen to the tapes whenever they have difficulty with their textbook assignments. The use of audiotapes helps the students develop reading comprehension skills, listening comprehension skills, and vocabulary and word recognition skills through a multimodel, auditory-visual approach.

The Students

Twenty resource room learning-disabled students participate. Students are in grades nine through twelve. The program can be adapted on all grade levels, in any classroom with a corner designated as a listening center. Group size does not matter as long as headphones are available.

The Staff

The program is implemented with the assistance of mainstream student volunteer readers who record textbook passages on tape and receive service credit. The program is supported by the principal, special education supervisor and education coordinator.

Materials and Facilities

A listening corner should be set up with a cassette tape recorder, cassette tapes, headphones and alcohol swabs for sanitary precautions.

Outside Resources

Student volunteer readers are the only outside resource.

Overall Value

The program meets the needs of reading-and learning-disabled students. It fosters independence, listening skills, reading comprehension and self-esteem in students. And, it may help to prepare some learning-disabled students for college.

More Information

Paul Nicolardi
William E. Grady
Vocational/Technical H.S.
25 Brighton 4th Road
Brooklyn, NY 11235
Telephone: 332-5000
Principal: Frank Medaglia

---

*For more information see "College for the Learning Disabled," *The New York Times Magazine*, pp. 82-87, February 21, 1982.

Juggling Our Way to Better Skills

The Program

Juggling Our Way to Better Skills involves teaching reading and writing skills through the art of juggling. The students acquire the ability to juggle while learning how to write a book and diary. Through the language experience approach to writing, the children produce a "reader" or book that they can read because they have written it. (In practice, the students verbally describe their experiences to the teacher, who writes the report on the board and then uses the report to teach writing skills.) The children learn, step-by-step, how to juggle. As they go through the learning process, they write in their own words what each step entails. At the same time, the teacher gives them lessons in composition. The children incorporate art into their efforts by making diagrams of each step. Each child also includes in his or her writing the feelings experienced while learning to juggle. Discussions are held at each juggling session so that the students may express their feelings. This helps the children see that others have the same ideas and problems. It also provides the children with a chance to help each other and to find solutions to common problems.

Program sessions are held at the end of every day. Holding them at this time is a great incentive for getting earlier tasks accomplished, since it is understood that a juggling session will be held only if the entire class completes all the day's assignments. The session includes either a writing period covering rewrites or new drafts, a new learning step with practice time, or a drawing period to diagram the latest step. Each night the children are given an assignment to practice for at least 15 minutes and to write, in their own words, what step they were practicing, what problems they had with the step and their feelings about them, and their solutions to the problems.

The end product of this program is the publishing of a juggling manual as a class project. This includes such subjects as: steps to juggling, diagrams to learn by, possible problems one might run into and solutions to these problems.

The Students

This program was used successfully with 10 special education students with minimal brain dysfunction in a Health Conservation 30 class. The children had no writing skills, and their reading levels were from two to four years below grade level. Most were considered to be below average in fine and gross motor control. All the students involved showed vast improvement in the skills taught.

This program could be adapted to any student population. The teacher need not know how to juggle. In fact, it is helpful to show the students that adults sometimes have a hard time accomplishing a task. The program should be presented in a "fun and games" way. Laughter should be encouraged when bags are dropped, thus keeping frustration levels at a minimum. The students will see that they all make mistakes, and usually the same mistakes.

The Staff

This program was developed by William Stone, while looking for a way to teach children who have short attention spans and are bored with the normal teaching process. It was given full support by the school principal Even though no funds were provided, the program was implemented on a trial basis with follow-up by the principal and supervisor. Parents assisted in implementing the program and provided each child with the money needed to purchase materials.

Materials and Facilities

The only facilities needed are a classroom with enough space for each child to be able to stand. Desks and chairs should be moved out of the way. It is also advisable to have at least one wall for the children to practice against. The program, when first proposed, included a set of juggling balls and a juggling book for each child. It could be undertaken with just three lacrosse balls for each of the students. The teacher would need a book on the art of juggling for reference.

Outside Resources

The teacher might make arrangements for a class trip to the circus. The teacher might also find some "street people" who perform at movie theaters or parks, and invite them to the classroom.

Overall Value

This program aims at satisfying a current need in education—namely, exposing children to a total language arts experience that includes teaching the techniques of reading and writing as well as improving fine and gross motor coordination. The children gain self-confidence and a positive feeling of accomplishment. This can lead to the feeling that they can succeed in other tasks, if they keep trying.

More Information

William Stone
P.S. 91-Learning Center
Central Avenue and 69th Street
Glendale, NY 11385
Telephone: 821-6880
Principal: David Levitman

Speech is Fun and Games

The Program

Speech is Fun and Games is a program designed to correct major articulatory defects (th, s, l, r) in all positions. The program is presented to the children through carefully worked-out games involving colorful charts and animal characters: Thump the Clown, Lyle the Leopard, Lionel the Lion, Race the Mouse. Each gameboard contains a specific problem sound. The child points to the word or sound that matches the activity pictured. Anything Goes is a game that addresses the middle "th" problem. A tree is drawn on the gameboard. The middle "th" sound is drawn on each of the branches (on which are pictured a "bathtub," "toothbrush" and "birthday cake"). The corresponding words are on strips of paper placed at the bottom of the playing board. A student picks up a word-strip and matches it with the pictures on the branch of the tree. If the word is articulated correctly, he or she gets to put the strip on the tree. If the child says the word incorrectly, he or she must return the strip to the bottom of the gameboard for the next student to use. The winner is the player who places the greatest number of strips on the tree. To reinforce the game's lesson, children are given copies of each board with its central figure. For homework, the child plays the game with a parent. Class charts record the number of games won for each skill area by each child. Informal oral tests are administered by the teacher. Remedial steps are taken as needed. Then, parents periodically review gains made. Some other games: Silver Treasures corrects beginning "s" problems; Race the Mouse Around the House, final "s" problems; and Lionel and Lyle, the Lions, beginning and end "l" problems.

The Students

Many students in this program have diverse speech patterns. These children have a crucial need to speak correct and standard English, to help them integrate socially into our country. Speech teacher Frances Paris, who developed the program, services 63 children. Some 800 more require varying degrees of speech instruction.

The Staff

This program was developed by Paris, a teacher of speech-hearing handicapped. The administration is highly enthusiastic over this approach to speech and language improvement. The program is designed to let classroom teachers, paraprofessionals and volunteers assist, but can be implemented without support.

Materials and Facilities

The basic materials needed for this program are flannel board, rexograph materials with game instructions, posterboard, oaktag, magic markers, tempera paints, and plastic accouterments (die, spinners, miniature characters). Dissemination of these materials enables the classroom teacher, under the supervision of the speech teacher, to engage in systematized instruction of correct enunciation and pronunciation. The materials are highly motivational and offer multisensory appeal and structured speech instruction. Thus, they can have schoolwide impact. Since homework sheets go home, a ripple effect is possible.

Other Resources

Artistically inclined parents can be helpful in reproducing materials for schoolwide dissemination.

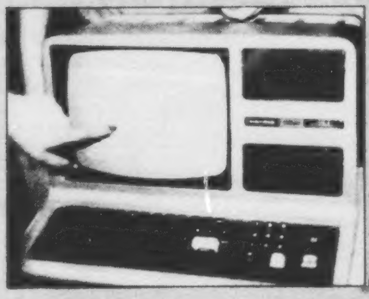
Overall Value

Says Paris: " 'My Fair Lady' says it all! The importance of good speech for future employment, social acceptance and self-image cannot be overestimated. The way a person speaks is too often the major hallmark for acceptance in our world, which sets high store by outside status symbols. We are deep in the heart of Brooklyn, where many of our children have such crucial speech errors as dentalization, speech misplacement (d for th as in "the") and ng errors. Children must be taught to help themselves at an early age, when they are still malleable and improvable. These materials have had great success with groups of children from different age levels. And we've held parent workshops. They loved them, too."

More Information

Frances Paris
P.S. 251
1037 East 54th Street
Brooklyn, NY 11234
Telephone: 251-4110
Principal: Cynthia R. Kamen

COMPUTER EDUCATION



Penny Iznasio

Einstein

The Program

Einstein is a short computer program, written in Basic, that begins by asking for a student's weight in pounds and ends by teaching him or her the consequences of the Special Theory of Relativity. The program automatically converts quantities in ordinary English units (e.g., miles, hours, pounds) into metric equivalents for computation, and back into ordinary units for read-out. It is interactive throughout: asking questions, reading answers, and replying in English on the cathode ray screen.

The Students

Einstein was devised for ninth-grade students in a twentieth-century history course. Though Saint Ann's selects for the gifted and talented, most of the students had never encountered the Special Theory of Relativity before. Few thought it relevant in any way. Since relativistic effects are rarely observed in ordinary life situations, they had become Newtonians by default, and it was difficult to teach a range of things, from the how and why of atom bombs to the effects of modern physics on nonrepresentational art. Students using the program, however, were able to imagine relativistic time and weight dilation, as well as the equivalence of matter and energy. Later, students not in the history class, from fourth to twelfth grade, including many who were newly charmed by computers, were loading and using the program during computer classes.

The Staff

Einstein was developed by William Everdell, who has taught history, economics and French for 20 years (the last 10 at Saint Ann's). No staff support was needed for the program beyond a friendly relationship with the computer mathematics instructor, Dorothy Wasserman, who taught Basic to Everdell and made arrangements to have the program available to students.

Materials and Facilities

This course requires a computer that is programmed in Basic, preferably several computers linked to a single external memory. The program is short enough to make no special demands on even the smallest minicomputer. At Saint Ann's, the system consists of six PET computers in a classroom, connected to a single dot printer and two disc drives.

Outside Resources

No outside resources are needed.

Overall Value

This is a simple, short and effective add-on program. Any school with a computer setup can use it for the price of a stamp. "In return," says Everdell, "*Einstein* will allow even very young and non-mathematical children to imagine themselves into the Einsteinian universe we live in, which threatens us with doom to precisely the extent that we fail to understand it."

More Information

William R. Everdell
Saint Ann's School
129 Pierrepont Street
Brooklyn, NY 11201
Telephone: 522-1660
Principal: Stanley Bosworth

Teaching Mathematics through Computers

The Program

The purpose of *Teaching Mathematics through Computers* is to select students who are two or more years behind in mathematics, as measured by the citywide mathematics competency test, and raise their scores two months for every one month in the program. In order to start the program, the students are shown how to operate the microcomputer. They are taught the parts of the computer and how to enter data from the keyboard. Then they are taught how to load programs from the master computer. After this introduction, students are able to work out problems using the computer. The program is implemented in a mathematics laboratory, a setting where students use manipulatives such as task cards, geo boards and computers, to learn or reinforce abstract mathematical principles and theories. Students are given a teacher-designed pretest, and then are grouped to work on various curriculum areas in mathematics (e.g., addition and subtraction, fractions, decimals, multiplication and division). When 75% mastery of these areas is achieved, the student moves on to another area. A disc of the mathematics curriculum guide, as well as mathematics programs prepared by program developer Frank Campisi, is available to interested replicators.

The Students

One hundred and fifty students from the seventh, eighth and ninth grades are involved in this program and are grouped according to age level. They meet four times a week for 40 minutes each session.

The Staff

Campisi is the computer science coordinator of J.H.S. 259, and sets up computer systems throughout the district. At present, he is showing art teachers how to use computers in their field. Campisi has taught computer courses at the Adult Education Center at John Jay High School.

Penny Iznasio

Materials and Facilities

Essential Math Program, Volumes 1 & 2, (distributed by Radio Shack Computer Center Publications), fits in with the New York City Public Schools' mathematics curriculum. The program is best held in a laboratory classroom with six TRS80 Radio Shack computers.

Outside Resources

None is needed.

Overall Value

Through this program, the mathematics scores of students are raised so that they can pass the Regents Competency Examination. The program also helps students move out of the Promotional Gates classes. "In general," says Campisi, "the students involved have shown a tremendous growth rate."

More Information

Frank Campisi
J.H.S. 259
7301 Ft. Hamilton Parkway
Brooklyn, NY 11228
Telephone: 833-1000
Principal: Nicholas R. Don Angelo

Penny Iznasio

Computer Literacy

The Program

Computer Literacy uses teacher-developed materials based on current books, magazine and newspaper articles to introduce students to computer language, and to familiarize them with what the computer can and cannot do, and how it can affect their lives. The teacher has one copy of *Are You Computer Literate?* which he uses as a reference for his daily lessons. Class discussions include such questions as "Why do computers exist?" "How are they being used?" and "How do they affect people?"

The Students

The class meets for 40 minutes daily and consists of 30 students of varying levels of achievement. A smaller group would be preferable, to make possible more individual attention. Students of lower achievement levels could also be trained for simple data processing.

The Staff

The program was developed by Charles F. Tannebaum, who also implements it. He has taken many courses in computer technology, the most recent under an NSF grant at Queens College. There are no paraprofessionals or volunteer assistants. The principal and assistant principal for mathematics are most encouraging and supportive.

Materials and Facilities

The class meets in a regular classroom. There are computers in the building, and they are used to provide hands-on experience. Filmstrips in the school library are utilized. It would be helpful to furnish a copy of the book *Are You Computer Literate?* by Karen Billings and Davis Marsund (Beaverton, Oregon. 1979) to each student.

Outside Resources

Students use their local public library for assigned reports. If some students have relatives or friends in the computer field, such experts can be called on for assistance.

Overall Value

Computers are helping to change business, education and government. They are changing what we need to learn and how we learn it. They are creating new jobs and eliminating or changing old ones. To quote *Newsweek* (February 22, 1982), "An enormous potential is at every man's fingertips—and a huge new industry is taking off."

More Information

Charles F. Tannebaum
Benjamin N. Cardozo H.S.
57-00 223rd Street
Bayside, NY 11364
Telephone: 631-4880
Principal: Bertram L. Linder

History of Mathematics: From Creation to Computers

The Program

This program, *History of Mathematics: From Creation to Computers,* brings an historical perspective to mathematics with emphasis on every high school mathematical topic. The origins, derivation and history of mathematics and famous mathematicians are studied. The course is student-oriented, inasmuch as the aim of each subject area is related to a field of mathematics that the student has either already studied in high school, or will be studying in the near future.The course is broken down into subtopics, such as the history of geometry or the history of algebra. In one lesson students learn how to calculate with primitive number systems, and they determine which systems are advantageous. In another lesson students review the Pythagorean theorem, using teacher-made materials that deal with historical events, stories and interesting facts to show how Pythagoras discovered this relationship.

The Students

This program is adaptable for all ages and all size groups or classrooms. Two years ago, developer Eliot Weiss taught it as a three- to four-week unit to 20 elementary school classes in Community School District 22. The students were mostly of average achievement.

The Staff

Weiss developed and now implements this program. It has the support of the administration and needs no paraprofessionals. Volunteers, however, are always welcome.

Materials and Facilities

A regular classroom is used, with PET (personal electronic transactor) computers, an overhead projector, textbooks and various rexographed materials. The students work in small groups, so a classroom with movable furniture is desirable.

Outside Resources

Guest speakers knowledgeable in historical mathematics, possibly from the college level, speak with students on different topics. The public library is used fully in the completion of one major research project, as well as a few smaller assignments. The students use a number of textbooks, such as: Boyer, C.B. *A History of Mathematics.* New York: John Wiley, 1968; Eves, Howard. *An Introduction to the History of Mathematics.* New York: Holt, Rinehart and Winston, 1976; Kline, Morris. *Mathematics in Western Culture.* New York: Oxford University Press, 1953; *Historical Topics for the Mathematics Classroom.* Washington, D.C.: National Council of Teachers of Mathematics, 1969; Peckham, Herbert. *Hands-On Basic with a PET.* New York: McGraw Hill, 1979; "Mathematics in the Modern World," *Scientific American.* San Francisco: W. H. Freeman and Company, 1968.

Overall Value

The introduction to alternative approaches to mathematical concepts as the early mathematicians saw them brings students a better understanding of those skills they are having trouble with. Students who find mathematics boring often enjoy the history, stories and events in the development of the field. After this course, students look with new respect at geometry, algebra or trigonometry and see the relevance, need and enjoyment of understanding and using mathematics. Yet another goal is introducing ideas of research and original projects dealing with mathematics. This can motivate students to think creatively in the subject area selected.

More Information

Eliot Weiss
Edward R. Murrow H.S.
1600 Avenue L
Brooklyn, NY 11230
Telephone: 258-9283
Principal: Saul Bruckner

John Cole

Workshop on Workshops

All developer teachers have the opportunity to participate in a "Workshop on Workshops" especially designed for teachers who will be presenting their programs at workshops. This special workshop features: learning to relax before and during a workshop, using an outline for referral purposes, utilizing visual aids, involving the audience, and improving speech, diction, voice and movement.

FOREIGN LANGUAGES

Adam Ware

Louis Souris et ses amis

The Program

Louis Souris et ses amis utilizes puppet skits, supported by a textbook, to teach the French phonic system. Great stress is also placed on vocabulary building. Each of the 15 lessons includes a playlet in which one vowel sound is emphasized. New vocabulary is introduced through a cartoon-style "répéter" page. Students memorize the skit, manipulate the puppets and speak their lines. Each lesson also contains a category of vocabulary that students learn to use in a series of oral and written drills, and a game or song.

The Students

The program has been used for three years in the fifth and sixth grades at Friends Seminary. It takes two years to complete the program in classes that meet three times a week. There is a fairly wide range in ability among the students, but none with a severe disability in English language arts enters the program. Classes have ranged from nine to twenty students. Twelve to fifteen would be ideal.

The Staff

Louis Souris et ses amis was developed by Margaret Gonzalez. Using sixth-graders, she has put on some of the puppet playlets and demonstrated the methodology at ATIS (Association of Teachers in Independent Schools) workshops. One other teacher has used the program, which has the enthusiastic support of the department head and principal.

Materials and Facilities

Each student needs his or her own textbook. Each teacher needs four puppets: Louis Souris (the main mouse), Madame Claire Voyante (a flamboyant aging opera star with an impressive chin), Merle Dubois (a blackbird) and Jules Prudent (a balding firefighter, smitten with the charms of Madame Claire Voyante). The program has just begun to use the school's new language lab, which is proving to be an invaluable tool.

Outside Resources

None is needed.

Overall Value

Through the skits, Gonzalez believes, students develop good habits of pronunciation, learning authentic intonation as well as the coordination of letter combinations (particularly vowels) and sounds. Through the categories and exercises, students begin to manipulate the language to their own ends. "As for the puppets," says Gonzalez, "it would be difficult to overstate the value of these little creatures in generating enthusiasm. They solve the problem of class participation. Even shy students are thrilled to hold onto Louis and say his lines."

More Information

Margaret Gonzalez
Friends Seminary
222 East 16th Street
New York, NY 10003
Telephone: 477-9500
Principal: Joyce McCray

Adam Ware

HEALTH EDUCATION

You've gotta have HEART

Sandra Platzman

All Systems Go: A Study of the Body's Systems

The Program

All Systems Go: A Study of the Body's Systems uses student-made models of various systems within the body to help children understand how the human body works. First, an outline of the human body is traced on standard typewriter paper from a cardboard pattern or a rexographed sheet. Then the students paste and label their representations of the parts and organs of the system that is being studied (e.g., respiratory, muscular, excretory and skeletal systems). These body system parts are made with art materials (construction paper, crayons, magic markers) and common household items such as cotton, ribbon, drinking straws, tissue paper and yarn. The models are used in discussion and enable children to visualize the workings of each system. They can follow a piece of food through the digestive system and follow the flow of blood through the arteries and veins in the circulatory system. With a model of the nervous system, they can trace a nerve impulse from its point of origin, through the spinal cord, to the brain, and back to the point of origin. The models are used in conjunction with filmstrips and textbooks. The children develop a healthy respect for their bodies. Explanatory notes are available for all teachers interested in this program.

The Students

Thirty-two third-grade youngsters with average reading scores participated in the program as part of their regular weekly health lesson last year. The program can be used by any elementary class.

The Staff

Sandra Adams developed and implemented the program last year. She enjoys using art materials and found materials for all her lessons. No assistance is necessary with this program, which can be implemented without support.

Materials and Facilities

All Systems Go is carried out in a self-contained classroom. Various kinds of easily available materials are used: paper, paste, crayons, cotton, wool and rubber bands. A filmstrip projector and opaque projector are helpful.

Outside Resources

No outside resources are needed.

Overall Value

The program teaches health with a fascinating approach, which in turn motivates the children to learn more about this all-important subject. The models provide a jumping-off point for supplementary lessons, such as nutrition and chart and diagram interpretation. "The youngsters find this program enjoyable," says Adams, "and appear to retain the information for long periods of time. One of the rewards of this program has been the fact that the children become self-motivated to obtain additional reading materials about the body systems."

More Information

Sandra Adams
P.S. 346
1400 Pennsylvania Avenue
Brooklyn, NY 11239
Telephone: 642-3000
Principal: Martin Rosansky

Sandra Adams

Experimental Awareness of Physical Handicaps

The Program

This program, *Experimental Awareness of Physical Handicaps*, has been developed to heighten the kindergarten child's awareness of, and sensitivity to, the blind, the deaf and the orthopedically disabled. The children are first introduced to, and permitted to "play" with, orthopedic aids. Discussion centers on who needs these devices and why. The children pretend their legs don't work and must maneuver during regular routines without walking.

To introduce vision impairment, the book *Orange Oliver, The Kitten Who Needed Glasses*, by Robert Lasson, is read and discussed. The Snellen Eye Test is given to each child, and the children experiment with opaque masks. Ellen Raskin's *Spectacles* is then read, and the children play "Blind Man." Wearing blindfolds and using prescription canes or sticks, they hunt for specific classroom objects or persons and learn that blind persons "see" through hearing and feeling. The comic book, *Bonnie, The Seeing Eye Dog*, tells the children about guide dogs. A guest speaker from the Lighthouse, accompanied by a guide dog, is invited to talk and show a film. Then the children are read *Cane in Her Hand* by Ada Litchfield.

The subject of hearing impairment is introduced when the children are having their hearing screening test. The teacher reads Litchfield's *Button in Her Ear*, and the children listen to the "Sound of Abnormal Hearing," a record. The teacher also reads *Meet Camille and Danille*, by Margaret Glazzard; some simple sign language is learned; and the film "Amy on My Lips" is shown.

Each segment of the program is followed by the appropriate puppet skit from the "Kids on the Block" puppets. Children's thoughts and reactions are recorded after each handicap is discussed. Teacher-directed questions elicit responses to "How did you feel when . . . ?" or "What would you do if . . . ?" As a culminating activity, the film "Hewitt is Just Different" is shown. The children then notice similarities between a mentally retarded person and a physically handicapped one.

The Students

Forty-six kindergarteners of average ability and achievement participated in this program last term. The class met daily. The program can be adapted to other age and ability levels, and to smaller groups.

The Staff

Virginia Spinetta developed and currently implements this program. She has 13 years' teaching experience, 10 years on the kindergarten level. The program operates without assistance. Spinetta has received the utmost support from the administration, her colleagues and the parents of handicapped and non-handicapped children.

Buddy Fair

Materials and Facilities

Materials needed are books, orthopedic supplies, masks, blindfolds, records, rental of two films and the "Kids on the Block" puppets. An extensive bibliography is available on request.

Outside Resources

A guest speaker from an organization such as the Lighthouse is an asset to the program.

Overall Value

Says developer Spinetta: "Any teacher who wants to help foster an unbiased, caring and sensitive attitude toward the handicapped person should adopt this program. It then may be possible to give the disabled child and the normal child a better future together."

More Information

Virginia Spinetta
P.S. 69
144 Keating Place
Staten Island, NY 10314
Telephone: 698-6661
Principal: Frank X. Kelly

Nutrition and Survival Education

The Program

Nutrition and Survival Education is a program that teaches children how to plant, cultivate and prepare vegetables that are tasty and nutritious. A window greenhouse provides space and facilities for growing plants and sprouts from seeds and cuttings. When the "crop" is ready, students cook a variety of dishes. Nutrition kits and planned menus are used to educate students in food preparation and nutritional value.

The Students

Nutrition and Survival Education was initiated in the curriculum of pre-nursery through third-grade classes but could be adapted through sixth grade. The program was developed in a bilingual school. Groups were small or large, depending on grade level.

The Staff

This program was originated and implemented by Karla Kirsch-Pretl, a teacher with 10 years of teaching experience in the United States and Europe. It was awarded a grant by the New York Heart Association and has received administrative and parental support. The Parents Association paid for the installation of the greenhouse window and publicized it. The National Dairy Council provided a nutritionist.

Materials and Facilities

A window greenhouse is desirable to enable the program to reach its full potential, but the program can be developed without it. Nutrition kits are most helpful.

Outside Resources

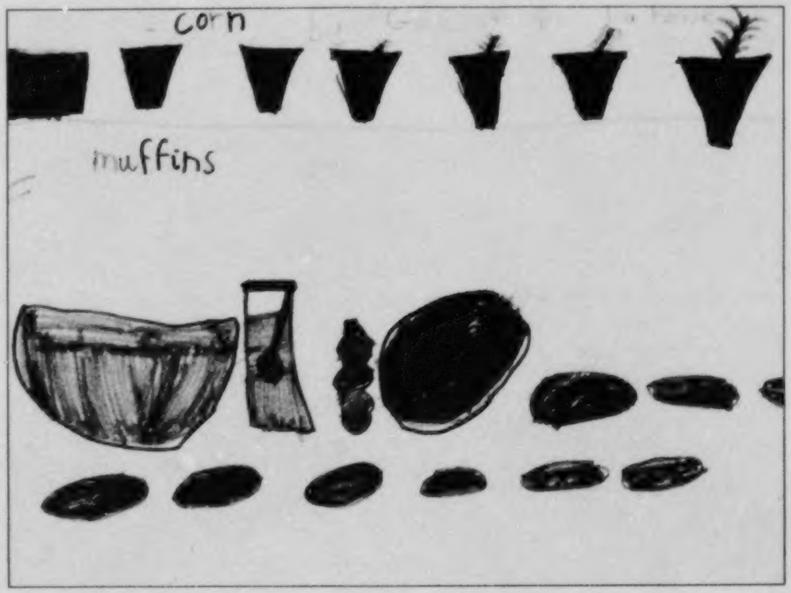
Nutrition and Survival Education is aided by the Parents Association, and parents with expertise in certain fields lend their support. The program has broadened to include dental hygiene, and utilizes a dentist as a guest speaker. A trip to a greenhouse or botanical garden is recommended.

Overall Value

According to Kirsch-Pretl, "*Nutrition and Survival Education* is not only educational, it is fun, since students enjoy planting and watching things grow. They also enjoy eating. And, it easily becomes interdisciplinary, involving such subjects as mathematics, reading, writing and art."

More Information

Karla S. Kirsch-Pretl
Fleming School
10 East 62nd Street
New York, NY 10021
Telephone: 759-6822
Principal: Douce Correa



Gaelle De LaFosse

You've Gotta Have Heart

Sandra Platzman

The Program

You've Gotta Have Heart is a multimedia program designed to make children aware of the importance of exercise, the effects of salt on hypertension and the dangers of smoking. They learn about circulation and respiration through a variety of materials and teaching approaches: class lessons, station activities, individual projects, a trip to a museum, guest speakers, films, songs, and spelling and vocabulary assignments. At station activities, students measure blood pressure and pulse, view filmstrips, share information about the sodium content of food, learn aerobic and anaerobic exercises, draw posters to discourage smoking, study diagrams about the circulatory system, and create their own T-shirts. Students select activities—"Salt Talks"—that further demonstrate the properties of sodium. Each child keeps a record of his or her sodium intake and learns to read food labels. As a culminating activity, other classes are invited to view the projects and experiments, have their blood pressures taken, sample low-sodium foods, and join in singing our theme song, "You've Gotta Have Heart."

The Students

Over 200 fifth-and sixth-graders have participated in the program over a two-year period. The range of ability has been from above-average to below-average, including special education groups, but the program is adaptable to any middle grade level.

The Staff

Sandra Platzman, a classroom teacher for 14 years, devotes a good deal of time to teaching health and science, but no special training is necessary to implement the program. Administrative support has been excellent but is not required.

Materials and Facilities

For six of the lessons, work is at stations in the classroom. A sphygmomanometer is needed to measure blood pressure. Several books, a film and a filmstrip are recommended. Many free materials are available from governmental, charitable and business organizations. Also available are a calendar of activities, all station and assignment sheets, tests, a museum questionnaire, a song sheet, a TRS-80 computer program, and a bibliography.

Outside Resources

A parent, nurse, student nurse or health aide with expertise in blood pressure measurement is needed to demonstrate the technique. Additional volunteers are also needed to be trained to supervise small groups taking blood pressure.

Overall Value

Evidence of the success of the program is demonstrated by the students' eagerness to participate. This is because of the hands-on nature of many of the activities. Reports from parents are very positive. "I look forward to each day's activities and am turned on by the enthusiasm of the children," says Platzman. "Everyone is constantly on the lookout for articles and programs related to a healthy heart. The key to the program's success is the inherent interest each person has in his or her own health and body."

More Information

Sandra Platzman
P.S. 81
5550 Riverdale Avenue
Bronx, NY 10471
Telephone: 220-8326
Principal: Bernice Schatz

Foster Grandparent

The Program

Foster Grandparent is a program that provides students with an introduction to various geriatric careers as well as an opportunity to become surrogate grandchildren and skilled geriatric volunteers. Students complete an in-depth course of study that combines three periods of instruction and practice in the classroom with three periods of workshop and practice at a nursing home. The curriculum comprises the following: an introduction to the physiological and psychosocial aspects of aging; exposure to a wide variety of careers available in the field of geriatrics; sensitivity training and reality orientation of person, place and time; a progressive skills program for constructive communication with the aged, and an opportunity to interact on a weekly basis with older persons.

The Students

The universality of the *Foster Grandparent* program allows it to be adaptable to students of intermediate, junior high and high school age, as well as to students of various levels of achievement. Currently the program consists of 60 eighth-grade students of low to average achievement. The makeup of the nursing home clients ranges from healthy to senile to severely physically handicapped. The residents are ethnically mixed. It is interesting to note that race, ethnicity and ability to perform have not been a factor in the selection or development of "grandchildren-grandparent" relationships.

The Staff

This health careers program was developed by Rose Molinelli, in conjunction with Esther Chernik, the nursing home recreation director, and has full support from both school principal and nursing home administrator. A health learnings teacher instructs students in the cognitive aspects of the curriculum, and a school aide assists Molinelli and Chernik at both nursing home and school sites.

Materials and Facilities

A regular classroom can be adapted by incorporating a geriatric learning center supplied with items that give students insight into the world of the aged. The sensory and mobility loss of the old can be represented; and methods aimed at bettering communications with the aged and fundamental interaction therapy are taught.

Outside Resources

The students must have access to a nursing home facility or senior citizens center where nurse, therapist, social worker or teacher experienced in geriatric work can provide training and practice for the students.

Overall Value

Says developer Molinelli of her program: "Lonely for visitors and companionship, 'adopted' grandparents suddenly have wonderful grandchildren who visit them weekly, work with them on various projects, share meaningful experiences and build fond memories with them. Through the fundamental therapies performed by the students, the aged also benefit physically from the skilled albeit young volunteers. The nursing home facilities also welcome the young students who lighten the load of staff members while brightening the lives of patients. In addition, the enthusiasm, motivation and sense of purpose exhibited by students is inspiring. Last June's graduates still come back to visit their respective grandparents, bringing gifts, tokens of love—and themselves. Students, who at first were awed and frightened by the frailties, senility and various handicaps of the nursing home residents, have come to appreciate them as wise, productive, talented and loving individuals who still have a great deal to contribute to others. There are other intangibles for the students' self-esteem, sense of responsibility, hope for the future, pride in a job well done, the feeling of being needed. These, in the long run, may provide us with a new generation committed to love and appreciation for all individuals, regardless of race, religion—or age."

More Information

Rose P. Molinelli
I.S. 218
370 Fountain Avenue
Brooklyn, NY 11208
Telephone: 647-9050
Principal: Nathan S. Rosenfeld

Ronald Attivisimo

HOME ECONOMICS

Gary Meltzer

The Intermediate School Student As Food Consumer

The Program

The Intermediate School Student as Food Consumer program uses various written, visual, verbal and mathematical skills to teach how to buy food wisely. Students are made aware of the importance of being an informed consumer in this course on nutrition study in the home economics program. Each student learns the basis for choosing foods for good health, and for preparing family meals and snacks. With this as background, the students now become involved with a project in which they have to calculate a typical weekly food budget for their families. Interviews with parents are conducted, and nutritious menus developed. Ways to save money—such as comparison shopping, reading labels, buying specials and couponing—are emphasized. The results of actual couponing and comparison shopping are discussed in class and illustrated through the use of overhead transparencies. Students organize a shopping list, with the help of the weekly local supermarket's special circular. They shop with the teacher and come back to the laboratory to cook a meal. The final cost of the meal is computed and discussed. With each food laboratory lesson, the students appraise labels, role play supermarket situations and practice writing business letters to food companies. Wise consumer habits or current events about foods are posted on bulletin boards. New vocabulary words are stressed.

The Students

Between 60 and 75 students participated in the program last term. Various sixth-, seventh- and eighth-grade classes met for four periods a week. The students' achievement levels range from slightly below average to average.

The Staff

The program was developed by home economics teacher Elizabeth Haller, who has taught in her subject area for 13 years. The program is implemented with the students' and the administration's support.

Materials and Facilities

Filmstrip projector, overhead projector and tape recorder are needed for the program. The text, *Teen Guide to Homemaking*, by Barclay, Champion, et al., is supplemented by materials prepared and rexographed by the teacher. The home economics food laboratory is used, though this program could also be housed in a regular classroom. The teacher receives supportive materials from the New York City Public Schools' Bureau of Home Economics, 347 Baltic Street, Brooklyn, NY 11201. Current copies of consumer magazines, such as *Consumer Reports*, are in the classroom library for student use.

Gary Meltzer

Outside Resources

Field trips to supermarkets are necessary, and the help of the supermarket manager can be enlisted.

Overall Value

"Students soon learn to develop respect for the economics of today's times," says developer Haller. "They sharpen their skills in wise consumer decision-making and are encouraged to become consumer advocates."

More Information

Elizabeth Haller
I.S. 391
790 East New York Avenue
Brooklyn, NY 11203
Telephone: 493-8920
Principal: Moishe Levitan

MATHEMATICS

Richie Rathman

Let's Go Consumer

The Program

Students in the math lab's *Let's Go Consumer* program have the opportunity to reinforce their mathematics skills with the aid of calculators, audiovisual equipment and "throwaway" materials such as flyers, daily newspapers and catalogs. Students develop positive attitudes towards mathematics, since the program is geared towards the ability of the individual. The students develop task cards and games that are used to illustrate concepts and problem solving. Calculators are used to aid in unit pricing. Success is achieved at all levels, inasmuch as the program provides a wide range of problems involving metrics, coordinate geometry, and weights and measurements. The program is interdisciplinary and develops basic skills in social studies, civics, science and nutrition, language arts and reading. The Math Fair and student publications are two of this program's culminating activities.

The Students

Seven classes (225 students) participate in this cluster program. These classes include intellectually gifted students and underachievers, as well as all other children from grades four to six. The children visit the math lab once a week. Class size averages 30 to 35 students. This program can be adapted easily to grades one, two and three.

The Staff

Marilyn Mandel, a cluster teacher with 18 years' experience in elementary schools, developed this program. The teacher must keep records, as a large part of the program is done on an individual basis. Strict organization is needed for storing task cards, worksheets and activities. Rexographing and laminating are done during preparation periods.

Materials and Facilities

One classroom is needed, with enough tables and chairs for the largest class. A tape recorder, phonograph and filmstrip projector should always be on hand. Rulers, pencils, crayons and/or markers, scissors, paste, calculators, newspapers, catalogs, supermarket flyers and duplicating equipment are needed.

Outside Resources

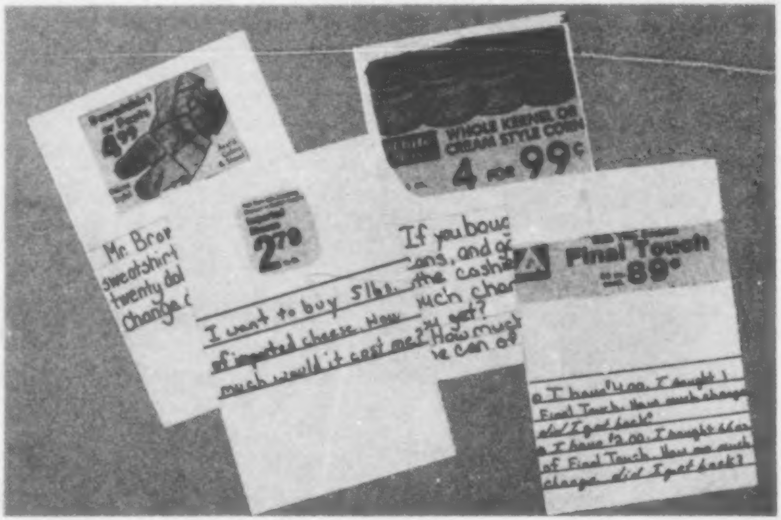
Parents become involved in pricing and checking labels for nutritional value. They also accompany the children on field trips to the local stores for the purpose of pricing articles. Through the use of such publications as *Penny-Power* (published by *Consumer Reports* for children), students become competent to make better consumer judgments.

Overall Value

Mathematics is no longer threatening to most students, since success can be achieved at any level. It is no longer an isolated subject but becomes an integral part of everyday life. Children feel that they are an important part of their community. They become good consumers and teach consumer awareness to their parents, as well. In turn, parents feel that their children are learning the value of goods and services, knowledge which will prove beneficial to them in later life.

More Information

Marilyn Mandel
P.S. 194
Avenue W and Knapp Street
Brooklyn, NY 11229
Telephone: 648-8804
Principal: Marvin Rubinstein


WHOLE KERNEL OR CREAM STYLE CORN
4 FOR 99¢
2.79
Final Touch
89¢
I want to buy 5lbs. of imported cheese. How much would it cost me?

Bryan S., Yvonne Ocasio, Grace Moy

Mathematics through Woodworking

The Program

Mathematics through Woodworking uses the experience of designing and building wooden models of cars, boats and planes to develop and extend mathematical skills. It works as a group project, with a common commitment and interest leading to discussion, diagramming, writing and cooperative effort. The students use a set of reference books on model building, as well as teacher-made activity cards. First they design their models, cut patterns and transfer the design to the wood. Then they cut and shape and build their models, using the basic woodworking tools. During each project they keep a book describing the tools used; and as a group they write about the process, from both a technical standpoint and an imaginative and aesthetic view. This includes discussing the beauty and function of wood, as well as its transformation into a moving physical object. Working skills are refined by using the reference books. Through this process, a special vocabulary and a sense of the value of reading are deepened. Activity cards and teacher-developed plans are available.

The Students

The project was implemented by developer Martha Meeh in groups of four to six children, working together and sharing and alternating use of equipment over a period of several weeks. The program was ongoing in an open classroom setting. The students were of mixed ages, five through nine years old, with a range of achievement levels. The program can be adapted easily to other age groups and settings. It can be used with little or no outside assistance, but the program does require a teacher with an interest in woodworking.

The Staff

The program is run entirely by Meeh, with minimal help from the administration.

Materials and Facilities

The program requires some basic equipment and materials that many schools may not have as part of their regular classroom equipment, but all are easily obtained. These include a woodworking table, padded with carpeting to cut down on noise; access to sink for cleaning of painting materials; reference books and activity cards; woodworking benches or tables; hammers and screw drivers; a small amount of wood; nails and paint. This is a very simple program and allows many children to have a very intense experience with a minimal supply of materials. Books used include *Model Cars and Trucks and How to Build Them, Model Airplanes and How to Build Them* and *Ship Models and How to Build Them,* all by Harvey Weiss.

Outside Resources

Trips to places featuring transportation (e.g., the local firehouse, airport, automobile body shop and new car showroom) are appropriate to the program and very useful. Also, a trip to the New York Historical Society may be arranged to study old modes of transportation.

Overall Value

Says Meeh of her program: "*Mathematics through Woodworking* allows children of different ages and levels of competence to work and interact together, to share and teach one another, and to build confidence in their ability to produce a high-quality piece of work. It is also a realistic way of encouraging girls to work at a project that is generally thought of as boys' activity. The girls' skill—and especially their confidence—has also been enhanced through this project."

More Information

Martha Meeh
Central Park East II-P.S. 109
215 East 99th Street
New York, NY 10029
Telephone: 860-6010
Principal: Debby Meier

Saving It

The Program

Saving It develops in students an understanding of the banking system—from novelty banks to local banks—by giving them the experience of actually having their own personal bankbooks. Students receive a weekly "allowance" which they may save or spend, depending on their choice of "D and W" (deposit and withdrawal) cards. A card may say, "You could have earned $4.65 babysitting but instead you went to the movies: pay $5." Children can also order from catalogs or play the large floor model of the deposit-or-withdrawal game. This activity enables them to travel around the board making mathematical calculations and economic decisions, and either winning or losing "money" for their "bankbook." Each child has a bankbook with his or her own number, which is programmed into the cassette drive memory of one of two PET (personal electronic transactor) microcomputers that are in the classroom. Before a deposit or withdrawal may be made, the child utilizes the computer to check his or her accuracy and to help calculate interest earned. The student then updates the memory of the computer with the current date and transaction. The program extends for one term of the school year and can be expanded or individualized, depending upon the needs and interests of the children.

The Students

A fifth-grade, heterogeneously grouped class of 33 children participates. The reading level of these children varies from 1.8 to over 12. The children come from working class lower- and middle-income families.

The Staff

Gail Backer, a fourth- and fifth-grade teacher for 14 years, developed this program with the full support of her principal and supervisor. Backer has worked with her classes on an individualized basis for many years and has integrated the use of electronic equipment, from calculators to computers, for eight of those years.

Materials and Facilities

A large, three-by-five-foot stiff board is needed to make the deposit-or-withdrawal floor game; plus small oaktag to made "D and W" cards and credit vouchers, and any available paper to make bankbooks. Deposit and withdrawal slips can be obtained from local banks. Several hand-held calculators to use in the classroom, and access to a microcomputer in the school, are helpful but not essential.

Outside Resources

Contributions for blank cassettes or discs and additional calculators are helpful. The class makes a field trip to a local bank to see how its computers serve its customers' everyday banking needs.

Overall Value

According to Backer, "through the use of computers and direct banking activities, children acquire many skills which they otherwise might have difficulty obtaining. The children are very enthusiastic; and because they are motivated and participating so actively and on such a personal level, the difficult concepts of computing interest, calculating deposits and withdrawals, and making economic decisions have been mastered by most of them. Students learn how to integrate modern technology into their everyday lives. As they go out into the working world, they will be better prepared to deal with the ever-increasing use of computers in our society."

More Information

Gail Backer
P.S. 106
2120 St. Raymond Avenue
Bronx, NY 10462
Telephone: 892-1006
Principal: Anna Petsche

Snack-Rite Adventures

The Program

Snack-Rite Adventures is a small-group business venture involving fourth-grade students in the packaging and sale of "natural" snacks (nuts, raisins, bread sticks and the like) to other students. The students deal with "real-life" experiences that foster an understanding of business problems and career choices in the food industry, encourage the eating of healthful foods, and reinforce the use of computation and problem-solving skills. Students are motivated to prepare research reports and imaginative stories which they assemble in a large book, *The Adventures of Snack-Rite*. Such original characters as "Health Hero," "Vita-Man" and Nutri-Gal" are created. Songs, poems, riddles, sayings and a "Snack-Rite Cheer" are written. Original lesson plans are available.

The Students

Fifteen fourth-grade students of average to below-average ability in mathematics meet six periods weekly. During these periods they (1) produce and sell the snacks on Monday, Wednesday and Friday; (2) keep records of inventory and sales, and do computing and bookkeeping; and (3) participate in nutrition and mathematics instructional activities. The program is easily adaptable to 30 children with two distinct groups of 15 each producing snacks for separate lunch periods.

The Staff

Mildred Beck developed and implements the program. She has 15 years of regular teaching experience in the New York City public schools, under the common branches license. Beck has taught kindergarten through ninth grade, holds a master's degree in education and has taught all subject areas. The program has the full support of the principal and can be implemented without additional staff. As a cluster teacher, Beck devotes six periods a week to the operation of the project. She instructs the children during these nutrition grant periods (District 27 Project Open awarded her program a start-up grant.) and devotes three administrative periods weekly to the business operation.

Richie Rathman

Materials and Facilities

Beck operates her program in a large music room. However, it can be run in any conventional classroom. There is ample shelf space in which she houses baskets, scales, scoops, plastic bags of products, and all instructional materials. Two wicker rolling carts, outfitted with baskets, are used to bring nutritional snacks around to classrooms, but selling could be done during lunch periods at a permanent stand equipped with cannisters. The nutritional snacks include such foods as sesame whole wheat bread sticks, raisins, unsalted peanuts, sunflower seeds (shelled), carob raisins and dried fruit mix. These are purchased at local health food stores.

Outside Resources

Field trips to local health food stores are made to purchase snack supplies. Guest speakers lecture on merchandising, or natural versus processed food products. Discovery Room, 535 Dodge Hall, Teachers College, Columbia University, has the largest collection of nutritional education materials in the area.

Overall Value

The program is highly motivational and involves several curriculum areas (nutrition, mathematics and career planning). It develops an understanding of the importance of these areas in the adult world. Children bring home a strong message for their families: "Parents: If you really love me, go easy on the junk food."

More Information

Mildred Beck
P.S. 106
180 Beach 35th Street
Far Rockaway, NY 11691
Telephone: 327-5828
Principal: Edward Levitan

Acoustic Research

The Program

This program, *Acoustic Research*, uses geometry, trigonometry and intermediate algebra to develop the knowledge of acoustical physics and electronic filter theory needed to actually build high-quality loudspeakers. Students learn the theory while reinforcing their tenth- and eleventh-year mathematics courses, and then actually build the speakers in woodworking shop.

The Students

Thirty students, approximately half in the eleventh grade and half in the twelfth grade, were in the program. Since Stuyvesant is a specialized science and mathematics high school, they are above average. This type of course needs students who are relatively strong in mathematics and science. Since it also involves woodworking, the size of any class should be restricted to 30. The class meets 10 periods a week.

The Staff

The program was developed by a mathematics teacher and implemented by him, with the help of a shop teacher. Both have many years of experience and rich backgrounds in various fields. They carry out the program without support.

Materials and Facilities

The mathematics/theory period uses an ordinary classroom. The shop period has table saws and lathes, drills, sanders, soldering equipment and an oscilloscope. Instructional materials include many teacher-built models that duplicate acoustical physics; for example, a spring with a mass attached to illustrate resonance and anti-resonance, or a lathe to wind inductor coils. Two background books are used: Weems, David. *How to Build, Test Complete Loudspeaker Systems.* Summit, PA: Tab Books; Colloms, Martin. *High Performance Loudspeakers.* New York, NY: Wiley Books. Most of the equipment is essential; in fact, more is needed.

Outside Resources

Field trips to speaker manufacturers such as Ohm Acoustics Corp. of Brooklyn, NY.

Overall Value

For the first time, students realize that "all the abstract mathematics actually can be used to build something I very much care about!" Knowledge is transmitted from the head, in the abstract, to the hands, to build a device they consider important to their lives.

More Information

Renato Alden
Stuyvesant H.S.
345 East 15th Street
New York, NY 10003
Telephone: 673-9030
Principal: Gaspar Fabbricante

Renato Alden

Basic Math-Art

The Program

Basic Math-Art develops the relationships between mathematics and art by using concepts of symmetry that derive either from slide, flip-and-turn mappings or from the harmonious relationship of a part to a whole segment. "Since symmetry is basic to artwork," says developer Delores Hoffman, "the geometric pattern in a mathematics unit may be used for constructing art patterns." These designs then form a link to other units, and possibly aid the development of mathematics concepts in these succeeding units. The relationships are explained in terms of congruence, parallel lines and similarity found in experimental motion geometry. Art patterns showing symmetry (such as tessellations and polygonal designs) are constructed with compasses, metric ruler and protractor, using facts from Euclidean plane geometry or motion geometry. Student originality is encouraged in making designs.

Mathematics teachers may work in the self-contained classroom. The program consists of 100 lessons, each covering a 40-minute class period. Some lessons relate to mathematics, and others discuss the applications of mathematics concepts to art. Each lesson, however, contains several objectives and appropriate content development for daily implementation. The lessons are grouped into instructional units with goals for mathematics and math-art. Unit tests are available. Student material that can be correlated with the lessons is provided on stencils. A bibliography of books that are good for teacher reference is available.

The Students

Presently, 280 students who are low achievers in mathematics are using the course. This type of student cannot succeed in academic mathematics and may still need to pass the Regents Competency Test. The materials are also suitable for eighth-grade average mathematics students. Some lessons on math-art can be used independently.

The Staff

The program was developed by a high school mathematics teacher for art-talented students, in the belief that applying their art talent to mathematics might help them in overcoming their inability to learn the latter subject. The innovation has received administrative support from the mathematics supervisor and from the principal.

Materials and Facilities

Student material may be duplicated from available stencils, and transparencies can be made for use with the overhead projector. At present there is no suitable textbook on motion geometry.

Outside Resources

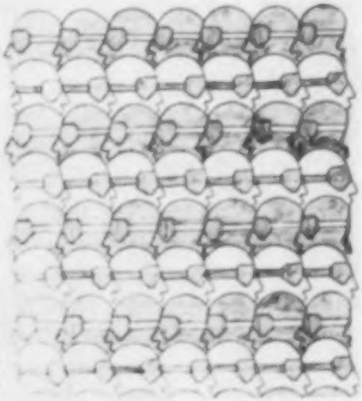
None is needed.

Overall Value

Students enjoy the program because it provides "relief" from the regimentation of the basic mathematics concepts classes. The math-art projects allow the students to express their creativity and imagination, even though they are applying mathematics concepts to their works. In addition, the application of these concepts to art projects serves to reinforce what is taught during math lessons. Several teachers are now using the course and find that it works for them. Student reaction has been good, and one student wrote, "It makes the tasks of learning mathematics less onerous."

More Information

Delores Hoffman
H.S. of Art and Design
1075 Second Avenue
New York, NY 10022
Telephone: 752-4340
Principal: Irwin Gross


Joseph Montalvo

John Nolan

Teacher Workshops

Each fall IMPACT II sponsors a series of workshops highlighting that school year's developer programs. The workshops are held at cultural and educational institutions around the city. Participating teachers are eligible to apply for replicator grants if they are interested in adapting program ideas.

During the rest of the school year, developer teachers are available to present workshops upon request.

MUSIC

Amanda Smith

Hey, Everyone Can Sing or Play!

The Program

Hey, Everyone Can Sing or Play! is an innovative music program that identifies the musical potential of students. The teacher uses musical aptitude evaluators (objective) and practical performance tests (subjective) to measure students. At the end of the eight-week program, the teacher can design an individual plan of instruction based on the students' musical strengths and weaknesses. The first step is to give the Primary Measures of Music Audiation (for kindergarten through third grade) and the Music Aptitude Profile (for grades four through twelve). Students then participate either in a vocal or an instrumental music class. This practical hands-on period permits the teacher to examine the students in areas that the music aptitude tests are not equipped to measure, such as fine motor ability, eye-hand coordination and the ability to sing on pitch.

The Students

Over 325 students have participated in this program for the last four years. Designed for kindergarten through twelfth-grade, this program is adaptable to any vocal or instrumental music class, including classes comprising special education or bilingual students, and can be used in conjunction with most instrumental and vocal method books.

The Staff

Les Levinowitz, a music teacher for 12 years at I.S. 88, developed the program at the school. He is a member of the Music Committee of the New York City Public Schools, an active research member of the Music Educator's National Conference, and a member of the New York State School Music Association and the United Federation of Teachers' Music Committee. He has the support of the school administration and PTA. He is presently involved in a research project in the area of musical potential.

Materials and Facilities

Materials used are the *Primary Measures of Music Audiation* (GIA Publications, 1980), and the *Music Aptitude Profile* (Houghton Mifflin, 1965), both developed by Dr. Edwin E. Gordon; the *National Association of Band Instrument Manufacturers Recruiting Manual*, by James Froseth, University of Michigan (GIA Publications, 1974); various vocal and instrumental music books; a piano; and musical instruments normally found in the schools.

Amanda Smith

Outside Resources

A number of periodicals will be helpful. These include the *Journal of Research in Music Education*, the *Journal of the Music Educator's National Conference* and the *Journal of the New York State Music Association*. Also needed are *The Psychology of Music Teaching* by Dr. Edwin Gordon (Prentice Hall Publishing) and various curriculum materials published by the New York City Public Schools and the New York State Education Department.

Overall Value

"No matter what one's musical potential, academic abilities, physical coordination or voice range and quality" says Levinowitz, "this program insures participants optimum utilization of their musical potential. The program objectively and subjectively identifies the musical potential of its participants, especially those thought to be musically talented. It permits the teacher to design a plan of instruction for each student, based on individual musical potential. Furthermore, implementation of this program will improve the quality of a school's performing musical ensembles. Not only does it consist of methods of musical potential identification that have proved, over a long period of time, to be reliable and valid, but also it directs the accurate placement of youngsters into various types of music classes, based on musical potential and other factors deemed to have an effect on one's success in music."

More Information

Les Alan Levinowitz
I.S. 88
544 Seventh Avenue
Brooklyn, NY 11215
Telephone: 330-9325
Principal: Gloria Cohen

The Dewey Performing Artists

Herman Gersten

The Program

Originally conceived as an outlet for performance-oriented music majors, *The Dewey Performing Artists* program has developed into a scheduled "four and one," program bringing student-written-and-directed shows into the local community 25 times per year. The shows' music ranges from 1600s madrigals to 1981 pop tunes. The program is open to all students with musical potential, both singers and instrumentalists. Judith Selsky, the group's advisor, assists students in creating musicianly performances and trains them in stage deportment, the use of audio equipment and script writing. Students receive credit in the form of laudatory letters for their dossiers, and course credit for work completed on independent study. *The Dewey Performing Artists* receive training in all aspects of small-scale show production. Weekly hour-long presentations for elementary and junior high schools and for many community organizations insure continuous instruction in script revision, staging and rehearsal techniques. Students who are not performing travel with the group and write evaluations of each show for discussion at future meetings. Because each show is given under assorted conditions in a variety of neighborhoods, performers learn to relate to audiences of all ages and widely differing backgrounds. For example, the most recent performance was at Brooklyn Borough Hall for the Brooklyn Borough President's inauguration party. *The Dewey Performing Artists* are scheduled to meet during the extended eight-hour school day. Other high schools can easily replicate this program as an extracurricular activity.

The Students

About 25 students, from 14 to 17 years of age and with varied academic backgrounds, participate in this program. The group meets daily with their teacher as an independent study activity. The program can be readily adapted for junior high school students. To insure the mobility of the group and its flexibility in performance, the number of students should not exceed 25.

The Staff

Judith Selsky developed and now implements this program. She is an experienced professional pianist, well versed in both the classical and popular idioms, with experience in musical theatrical production and vocal music teaching. She is almost entirely responsible for the scheduling of performing dates, publicity and working with the school district offices to obtain transportation.

Materials and Facilities

A small public address system, with at least three microphone inputs, guitar amplifier, bass amplifier, drum set and piano, are required for most performances.

Outside Resources

No outside resources are required.

Overall Value

The Dewey Performing Artists helps maintain an image of John Dewey High School as an exciting educational environment. More important, this program gives students the experience of performing before a variety of live audiences (adults and elementary, junior high and high school student groups). Selsky merely acts as the group manager; the students plan and design each program for the specific audience they will be entertaining. Dozens of letters of appreciation from students and teachers, as well as continuous requests for repeat visits, indicate the success of the program.

More Information

Judith Selsky
John Dewey H.S.
50 Avenue X
Brooklyn, NY 11223
Telephone: 373-6400
Principal: Lew Smith

John Cole

Award Ceremony

Each year, developer and replicator/adaptor grant recipients receive their awards at a ceremony that is followed by a reception. Grant recipients are joined in this celebration by principals, assistant principals, IMPACT II Review Committee members, New York City Public Schools staff, UFT and ATIS representatives, and developer and replicator/adaptor award winners from past years.

PHYSICAL EDUCATION

Norma Matusewitch

85

Dance at P.S. 75

The Program

Dance at P.S. 75 permeates all areas of the child's life, from developing freely moving bodies, to working with others in problem solving, to using movement as a means of expression and communication. The children come to the dance room at least once a week as part of the cluster program. By the time the children are in the upper grades, they are actively and enthusiastically involved in creating their own dances. While the basic movement exploration is ongoing, classes and their teachers come up with many ideas that are developed together with dance room personnel. This year at Halloween, five classes presented a program based on songs, poems and music. A fifth- and sixth-grade group choreographed "Night on Bald Mountain" to music by Moussorgsky. The Christmas program was moving, not only for the quality of the performance (dancing, sets, costumes, lighting) but also for the involvement and enthusiasm of the audience—made up of students, staff, parents and friends. A videotape of the production was made and shown on cable TV.

Each year the sixth-graders choreograph their own graduation dance. Last year 23 children danced to the "Bach Double Violin Concerto" played live by three members of the graduating class. This year the class is planning a dance to Scott Joplin's ragtime that a child is learning to play. The title of the dance, "Ruckus Manhattan," is taken from an art exhibit that provided inspiration in artwork and dance.

The Students

Approximately 540 students comprising 18 classes from kindergarden through grade six participate in the *Dance at P.S. 75* program. Groups are mixed academically, and include mainstreamed, special education and bilingual children. The program can be adapted to other age groups and all achievement levels. It can be carried out with small groups, an entire class or combined classes.

The Staff

The program was started with another teacher who now has a creative dance program elsewhere in Manhattan. It is being continued at P.S. 75 by dance teacher Jody Gottfried, with the active support of class teachers who provide much of the material used. Paraprofessionals and student teachers assist. The Parents Association actively and enthusiastically supports the dance program and contributes funds annually. School aides provide technical assistance, including lighting and videotaping. The program is wholeheartedly supported by the administration of the school, most notably by the bilingual coordinator and the principal.

Materials and Facilities

The dance room at P.S. 75 is a regular classroom, with a portable dance floor built with student contributions and parent/teacher labor. All that is really necessary is space to move freely. The children dance barefoot in comfortable clothing. A dance drum plus record player and cassette recorder are used for accompaniment. Other equipment and materials needed include duplicating machines; art supplies for costumes, sets and props; and audiovisual equipment. Also of use is a "library" consisting of a record and tape collection, dance magazines, a concise summary of movement concepts, lesson plans, movement word lists, charts and curriculum checklists for each grade level. A complete bibliography is available on request.

Outside Resources

The universities that have dance education programs provide a link to other educators in the field. New York University, Columbia and Marymount send observers and place student teachers in the dance program. Older children are kept informed of dance concerts and dance programs in the city. Children are encouraged to read dance reviews and watch "Dance in America" and other dance programs on television. Dance has become a theme for class trips to Riverside Church, Town Hall and Lincoln Center. Guest dancers visit the school. Parent volunteers often join the classes, and have provided expertise in Hispanic and African dance. The Parents Association also makes a contribution to the dance program each year.

Overall Value

Children love to express themselves through movement. In the school program they develop freely moving bodies, self-control, self-esteem and the ability to work with others. Dance has all the satisfactions of play and art, and can enrich all areas of the curriculum. Children learn to appreciate dance and be a good audience. They learn to share and evaluate what they do and see. Dance has become a favorite activity at P.S. 75, and it is an integral part of school life.

More Information

Jody Gottfried
P.S. 75
735 West End Avenue
New York, NY 10025
Telephone: 678-2876
Principal: Luis Mercado

Think and Move

The Program

Think and Move enables students to develop sports skills by analyzing, comparing and understanding movement patterns. The class is organized into four or five squads of five students each. Students are shown certain skilled movements, such as various tennis positions (forehand, backhand and serve). Then, while four students practice the movements, they are videotaped by the fifth student. Then the camera-person is taped. After the session, the students view themselves and compare their movements and positions with an expert player performing the same movements. They then analyze and evaluate their own movements. Students learn how to think precisely about what they are doing. They become concerned with the process, not just the product, and begin to learn techniques and patterns of movement and form, working together to analyze each other's performance. By building a supportive classroom environment, students become more confident of their athletic ability. No longer is the score the most important part of the game; the ability to improve one's performance on the field becomes paramount. Lesson plans for teaching movements, and worksheets that enable students to analyze and compare performances, are available.

Marc Salzman

The Students

Sixty seventh-, eighth- and ninth-grade students participated in the program last term. The students' achievement levels ranged from average to below average. The class met twice a week. This program can be adapted to secondary students (grades 7 through 12). It can be used with large and small groups of all ability levels.

The Staff

Brian Spears, physical education teacher at the Sports School, developed *Think and Move*. The program has one paraprofessional who works with the students while they practice. The teacher works with small groups during the filming of their movements. The program has the support of the school director and other teachers.

Materials and Facilities

The gymnasium is used for practice and videotaping. It is necessary to have videotape equipment, a filmstrip projector and/or posters of movements, video cassettes, filmstrips and a rexograph machine and paper. Still photographs of students can be used to compare with photos or posters of experts.

Outside Resources

Students can attend sporting events to observe and even photograph expert athletes in action.

Overall Value

"*Think and Move*," says developer Spears, "is one of the best ways to teach students standard movements for playing all types of sports. Students become observers and relate to sporting events with a sophisticated eye. And, the playing field is seen as a challenge for self-improvement."

More Information

Brian Spears
Sports School
315 East 113th Street
New York, NY 10029
Telephone: 860-6008
Principal: John Elwell

John Cole

Informal Replicators

Many teachers replicate or adapt IMPACT II developer programs without applying for a replicator grant. In some cases, replication of a program need not require funding; in other cases, the teacher has already received an IMPACT II grant. In the above photograph, Kate Brenner, a teacher at P.S. 140 and a 1980-81 developer teacher, exhibits student work to parents. This work is the result of three programs she informally replicated in her classroom— "Folk Heroes through the Arts" (Phillip Seymour, P.S. 40M), "Storytelling through Puppetry" (Alissa Schiff, Sports School), and "Write to Read" (Lila Baskin, P.S. 165).

SCIENCE

© Adam J. Stoltman

The Emperor Penguins

The Program

The Emperor Penguins is a study of the cooperative behavior of penguins as they raise their families and bear the hardships of life in Antarctica. Through books, dramatizations, music and movement, and crafts and games, the children learn how the young chicks are born, and how father and mother penguins share in caring for and protecting the young, and in providing the family with food. After dramatizing family life at the rookery, the class makes miniature Antarcticas, papier-mâché penguin chick eggs and cloth penguin chicks to put into the eggs. Other activities include making a land, sea and air mural of Antarctica; building models of clay penguins and killer whales; playing the "catch-a-whale" magnet number game and an Emperor Penguin table board game. A recapitulation of how penguin chicks come into being is depicted in an eight-part comic-strip drawing.

The Students

The kindergarten class of 22 is composed of five- and six-year-old students. The craft activities are done in the daily one-hour work period, generally preceded by a 10 to 15-minute group planning time. The project is completed in three to four weeks. It can be used with large or small groups. With older children, the project could include more geography, reading, and creative writing and the difficulty of the arithmetic could be increased.

The Staff

Arlene I. Mayers developed the project and implements it, with the help of an assistant teacher. Mayers has taught kindergarten for over 20 years at the Midtown Ethical Culture School. She is the author of "The Birds and the Bees are Not Enough," published in the *Independent School Bulletin*.

Materials and Facilities

Classroom materials include tagboard, cardboard, balloons, paint, fabric, styrofoam, shiny paper and clay. Basic books are: Mizumura, K. *The Emperor Penguins*. T. W. Crowell, New York, 1969; Roehls, Iliane. *The Penguins*. Grosset and Dunlap, New York, 1969; Atwater, Florence and Richard. *Mr. Popper's Penguins*. Little Brown, Boston, 1938.

Outside Resources

The Bronx Zoo is a fine resource. Also, fabric contributed by parents helps keep the program going.

Overall Value

The Emperor Penguins teaches sharing and cooperation, and offers a dramatic illustration of positive family relationships. According to Mayers, "Both boys and girls are excited about all aspects of the project. They love making their own baby egg; they identify with the sharing and caring in the family unit; they are thrilled and concerned with the dangers in the Antarctic existence; and they experience great satisfaction of achievement because the craft activities are simple and fun to do."

More Information

Arlene I. Mayers
Midtown Ethical Culture School
33 Central Park West
New York, NY 10023
Telephone: 874-5200
Principal: Allan Shedlin, Jr.

Adam J. Stoltman

Inner-City Tree Study

The Program

This program, *Inner-City Tree Study,* introduces children from inner-city school environments to the outdoors and helps develop a strong appreciation for the preservation of trees. Trips to local parks, sanctuaries, botanical gardens and immediate school neighborhoods take place. The gathering of leaves, rubbings of bark and samplings of soil surrounding trees help in their identification and future care. Seedlings are ordered from the state and nurtured in the classroom. They are planted later in suitable areas in local parks and neighborhoods. This activity lets the children participate in helping to improve the environment.

The Students

The *Inner-City Tree Study* has been in existence for three years, and each year has brought improvement to the program. Originally designed for grade four, it has proved easily adaptable to other grades by adjusting to the reading levels, writing skills and science interest levels of the children. Approximately 60 students (ages 8, 9 and 10) at different levels of achievement have participated in this successful program. The program is held in the fall. There is one class trip a week, and at least two hours a week are spent in the classroom observing films, listening to foresters and preparing tree research booklets. Seedlings that have grown in terrariums over the winter are planted in the spring. In the fall a small tree can be purchased for planting before frost.

The Staff

The program, written by Barbara Brick, a fourth-grade teacher, was originally designed to let urban students study trees beyond the city limits. Since so many inner-city resources and parks are available, the program has been modified for urban use exclusively. A state grant helped develop the program, and many of the books and supplies purchased under this grant are currently in use. A large indoor terrarium plus a compost pile on the school site, as well as two trees planted in the school sidewalk, have been maintained as a school project. A science coordinator has been appointed to keep this an ongoing school project.

Materials and Facilities

New York City's streets and parks provide 90 percent of the space needed to carry out this program. The classroom accounts for the rest. Projectors for various free films and a school duplicating machine for printing worksheets are available. The school science coordinator also provides materials and extra reading material.

Outside Resources

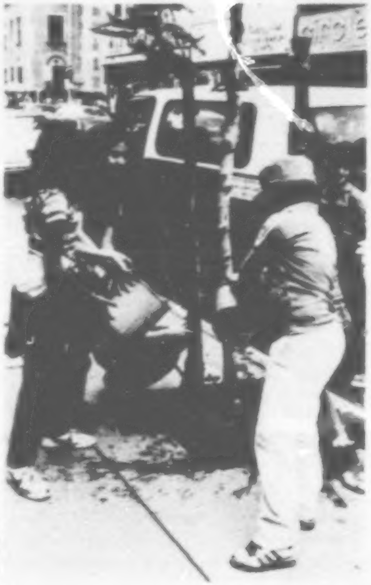
Students walk through the neighborhood and visit local parks, botanical gardens and bird sanctuaries. Urban park rangers also are glad to assist the program with visits and lectures.

Overall Value

"*Inner-City Tree Study,*" says Brick, "can meet the needs of any school neighborhood in the city. The program introduces the children to the out-of-doors and develops in them an awareness of the need to protect the natural environment and save city trees. If has helped youngsters develop an understanding of their dependence on the immediate natural environment. Another benefit is the small-group interaction during the activities—interaction that strengthens the social awareness of the students. The program has also been shown to improve reading and writing and research skills. A totally unexpected benefit has been the stimulation of local civic groups to take action and protect the city's trees."

More Information

Barbara Brick
Packer Collegiate Institute
170 Joralemon Street
Brooklyn, NY 11201
Telephone: 875-6644
Headmaster: Peter Esty



Barbara Brick

Problem Solving through Scientific Inquiry & Discovery

The Program

Problem Solving through Scientific Inquiry and Discovery provides students with hands-on activities designed to improve their problem-solving capabilities. Based upon research drawn from national curriculum projects, the student activities are organized into four learning experience modules (LEMs). The modules are flexible teaching units that focus upon scientific methods and investigative techniques. In the photographic module, students investigate photography by constructing and using simple-lens cameras. They learn about chemical solutions and reactions by developing photographic negatives, and practice darkroom techniques that combine optical and chemical knowledge. The electronics module includes construction of electric meters, motors, quiz games and basketball games. The chemistry and measurement modules provide students with opportunities to conduct experiments and construct and use scientific apparatus. All the activities described are illustrated on task cards that are prepared by students and teachers and are available to interested teachers in other schools. A bibliography and list of agencies which offer free services are also available.

The Students

One class of fifth- and sixth-graders participated twice a week for a year. Each class of 35 students was heterogeneously grouped. The program can be adapted to any age or level of ability, since it is the processes that are emphasized, not the curriculum level. Class size is unimportant because most activities are conducted independently or in small groups.

The Staff

The program was developed by Philip Liotta, the school's science cluster teacher. It was designed for classroom teachers, in order to articulate the science cluster program with the homeroom class science program. Liotta has been an elementary and junior high school science teacher for the past six years. He has also been a classroom teacher in grades three through six. The classroom teacher implements the program. The science cluster teacher serves as the coordinator and resource teacher. To implement this program in more than one class, an administrator is needed to act as program coordinator.

Materials and Facilities

This program was designed to be implemented in regular classrooms. A section of the classroom should be made into a science center. The program does not require complex equipment, only cabinet space for materials and display. However, any special equipment owned by the school, such as computers and microprojectors, can be incorporated into the LEMs. Participating classes require access to the school library, and participating teachers require access to duplicating machines.

Outside Resources

Most of the program materials are common household items found in kitchens and basements. We found local college science departments to be valuable resources for equipment and for students to help in the program. Participating teachers can obtain much of the program material from parents.

Overall Value

Learning to unravel the mysteries of nature is rewarding to all children, regardless of their academic abilities. Because of children's natural curiosity, a simple listing of projects is enough to motivate student interest in and commitment to the program. The student excitement generated by constructing and taking photographs with a handmade, shoebox camera is contagious. Says Liotta: "Teachers who have previously expressed doubts about their own abilities to understand scientific concepts quickly appreciate 'the process of learning' which is the heart of *Problem Solving through Scientific Inquiry and Discovery.*"

More Information

Philip Liotta
P.S. 99
82-37 Kew Gardens Road
Kew Gardens, NY 11415
Telephone: 544-4343
Principal: Edward Morris

Let's Make a Kaleidoscope!

John Rodriguez

The Program

Let's Make a Kaleidoscope is an effective culminating activity for the science unit, "Mirrors and the Reflection of Light," which teaches children how light bends, and how it is focused and reflected. Making a kaleidoscope enables students to apply the insights gained in this unit. Using masking tape the children form a triangle of three mirrors, (each measuring 2½ by 1¼ inches), with reflective surfaces facing each other. They then attach tracing paper at one end of the triangle with scotch tape. A variety of brightly colored sheets of construction paper, or glossy paper from magazines, is cut into different shaped bits. A handful of the colored bits is dropped into the triangle. Next they cut a half-inch circle in the center of a second piece of tracing paper and create a "window" by scotch taping clear plastic wrap over the hole. This is attached to the open end of the triangle. The students insert the triangle into a cardboard tube (toilet paper rolls are excellent) 2½ inches high, taping it in place. Finally, the tube is covered with decorative gift-wrap paper.

The Students

This program was implemented in three fifth-grade classes of diverse academic achievement. Approximately 90 children participated in the activity.

The Staff

The program was developed by Esther Horne, a science cluster teacher, and a fifth-grade student, Tsui Kam Lai, who first used the science unit concepts to design a kaleidoscope with found objects.

Materials and Facilities

All the work took place in the classroom. The materials were contributed by adults and children from the school population. The mirrors were leftovers from a dental program, and everyone brought in toilet paper rolls and leftover gift wrappings. The only materials bought were scotch tape, masking tape and tracing paper.

Overall Value

The children seemed to derive great pleasure and pride from having made a working toy which each had developed from scratch. They were highly motivated to succeed, and could do so only if their understanding of light and reflection were complete. Environmental awareness was increased by this practical use of junk items. When the program was presented at the Elementary School Science Association "Make It! Take It! A Hands-on Workshop" at Fordham University, it was enthusiastically received by the many teachers who themselves sat down and made a kaleidoscope.

More Information

Esther R. Horne
P.S. 2
122 Henry Street
New York, NY 10002
Telephone: 964-0350
Principal: David Fong

Operation Eat Well

The Program

Operation Eat Well is an adjunct to an existing science program in which students learn about body structure and function. In *Operation Eat Well*, students explore the nutritional needs of the body, examine available food products, and plan healthy, well-balanced diets. The program provides students with an understanding of the need for the development of healthy eating habits. Parents are involved, so that the program may also help to improve home food selection and dietary habits. Students collect food packages and containers for study. They examine in detail the nutritional contents of various food products. They then make comparisons with daily nutritional needs. Also, a scrapbook of food advertising is assembled. The advertising is discussed in the light of what has been learned about food and body needs.

There are several other activities in *Operation Eat Well*. A "food train," staffed by students, travels to lower-grade classes and provides minilessons and demonstrations in good, healthy eating habits. A newly created home economics club provides students with basic food preparation skills. And a food fair offers opportunities for students to view and sample foods with which they may be unfamiliar and which are high in nutritional value.

The Students

Between 60 and 70 fifth- and sixth-grade students participated in this program twice a week for a total of 90 minutes. The students' achievement levels were below average to above average. This program can be adapted to all age groups and levels, with minor modifications.

The Staff

Reevan Tucker, a teacher of social science, developed this program with an interdisciplinary approach, thereby involving all subject areas. Since the school is departmentalized, all teachers plan together so that work done in the various curriculum areas is interrelated.

Materials and Facilities

Most of the materials necessary for conducting this program, e.g., art supplies and duplicating materials, are readily available in any school. Materials for purchase include hot plate, toaster oven, paper plates, plastic knives and forks, and foodstuffs. No special classroom alterations are required.

Outside Resources

To supplement the curriculum, experts in food and health fields are invited to speak. Included in this group are the school nurse, the school dietitian, a representative of the Board of Health, the community school district health coordinator, and a local food retailer. Parents are also invited to participate in these lectures and discussions. Materials are reproduced in English and Spanish and are sent home, to provide parents with information helpful in meal planning. Trips are planned to a working farm (John Bowne H.S. in Queens), the Fulton Fish Market, La Marqueta on 116th Street and Park Avenue, a local food market and a nearby McDonald's (which offers a guided tour). Finally, a student committee meets with PTA members, the lunchroom supervisor and the dietitian to plan menus.

Overall Value

According to Tucker, numerous HEW and other agency reports indicate that only 40 percent of school children nationwide between the ages of 6 and 12 receive a proper diet. The goal of this program is to provide the students with a basis for food selection which meets their nutritional needs. Adds Tucker, "Since the parent is directly responsible not only for the purchase of food but also for menu planning and preparation, it is essential that the parent as well as the child be aware of what constitutes proper nutrition and a proper diet."

More Information

Reevan Tucker
School of Science and Humanities
216 East 12th Street
New York, NY 10035
Telephone: 860-7950
Director: Alan Sofferman

Terrariums: Tools for Understanding Adaptation

The Program

Terrariums: Tools for Understanding Adaptation is a program that uses miniature environments in the classroom to gradually reach an understanding of the widely varying mores and cultures of people around the world. The program begins using terrariums to create two environmental extremes, the desert and the rain forest. The children build these environments and observe the characteristics of the plant life that thrives in each of the two dissimilar places. They note similarities and differences in the structure of the plants in each environment. They are taught that plant structure is a survival technique. In their related study of the people who inhabit deserts and rain forests, the students see customs and habits that are also techniques for adaptation and survival. They begin to realize that to understand how people live you must know where they live. Thus, students learn that behavior previously considered strange may be necessary for survival.

The Students

The entire fourth grade participated in this program. The students built the terrariums in half-class groups of about eight children. Groups larger than this are unworkable, but smaller groups are acceptable. The program can be used with any achievement level, but with very low achievement levels a modification of goals might be necessary.

The Staff

This program was developed by Carol Schulhof, a classroom teacher and former guide at the Brooklyn Botanic Garden.

Materials and Facilities

Any classroom with a large work table and sufficient light to keep the terrariums alive is satisfactory. Two fairly large terrariums are needed, plus plants to fill them.

Outside Resources

The conservatory of the Brooklyn Botanic Garden provides a first-hand experience of actually being in a desert and a rain forest.

Overall Value

Developer Schulhof explains, "Children observe the adaptations that plants make to their environment in order to survive. This knowledge helps the students understand survival behavior of people in similar circumstances and environments. They can then apply these lessons to people everywhere."

More Information

Carol Schulhof
Packer Collegiate Institute
170 Joralemon Street
Brooklyn, NY 11201
Telephone: 375-6644
Headmaster: Peter Esty

Barbara Brick

The Chemistry of Cosmetics and Household Products

The Program

The Chemistry of Cosmetics and Household Products program is designed to give students an understanding of cosmetics, one of the oldest fields of applied chemistry. Students work in a laboratory with an emphasis on discovery and direct experience. Many chemical skills and techniques are involved: careful reading of instructions; taking accurate measurements; organizing a system of preparation; the mixing of powders and pastes; and understanding how ingredients form an emulsion. Students are given an instruction sheet to read, which the teacher then reviews with them. Working in pairs, students obtain the materials from a supply table, make their own measurements and proceed with the instructions. They are encouraged to observe all reactions carefully. Once they have made a product according to instructions, they can, in some cases, make it again, using their own initiative to alter the ingredients. Soaps and hand creams are particularly amenable to such experimentation. Finally, students package the product as attractively as possible and prepare a label. And they may form a company, either by themselves or with partners, and end up with a series of products under one brand name.

The Students

Sixty-six sixth-grade students of average and above-average achievement participated in the program. Each class, which met for one hour every week, consisted of eleven children. The program is quite versatile and can be adapted to larger or smaller groups and to various age or achievement levels.

The Staff

The program was developed by Frances Rose Sternberg, and has the support of the administration. It does not require additional assistance.

Materials and Facilities

This program is best conducted in a laboratory. Items needed include a Bunsen burner, tripod, beaker, flask, scale, measuring instruments, and various chemicals and ingredients. It is also possible to use a regular classroom and improvise with alcohol lamps and kitchen utensils.

Outside Resources

If one is fortunate to have a student whose parent works for a cosmetics company, it may be possible to arrange for a visit to its laboratory. The other outside resource that is needed is a source for jars and bottles; and here, too, parents can help.

Overall Value

Children love to work in a laboratory and "combine chemicals," especially when their work produces interesting items they can take home to their parents or add to their own collection of school memorabilia. Says Sternberg: "This is a wonderful way for children to learn or review measuring skills and to use the scientific method for problem solving. The children must read the instructions with care; and in some cases they increase or decrease measurements and add their own individualism to the recipes."

More Information

Frances Rose Sternberg
Midtown Ethical Culture School
33 Central Park West
New York, NY 10023
Telephone: 874-5200, Ext. 349
Principal: Allan Shedlin, Jr.

DOUBLE-ZING HERBAL ASTRINGENT

⅛ teaspoon powdered alum
1½ tablespoons witch hazel
1 tablespoon tincture rosemary
1 tablespoon tincture chamomile
½ teaspoon tincture benzoin
A pinch of thyme

Dissolve alum in witch hazel in your bottle.

Add rosemary, chamomile, benzoin, and thyme to your bottle.

Set aside for a few days.

Strain, and it is ready to use.

This astringent wakes up your skin. It is also a mild antiperspirant.

Determining a Biome from Collected Specimens

The Program

In the program called *Determining A Biome from Collected Specimens,* students are taught to collect and identify samples of their biome, the deciduous forest, and then send them to other schools. The other schools send samples of their environment for students in this program to identify. At the start of the program each student was given a lab sheet. This included information on how to collect specimens and questions to be answered on what was observed. Next came a field trip to gather roadside weeds and wildflowers. Students were taught to collect specimens without damaging them, to label specimens collected, to identify their specimens by referring to books and pamphlets, and to mount and display their collections.

Program participants were given one week to do all this and then hand their work in to be evaluated. About two weeks after the field trip, each student brought in some item characteristic of his/her neighborhood biome. Students labeled and numbered their specimens, packed them into a box and sent them to a school in Connecticut, which returned a similar box. Next year the exchange will be with a school in St. Thomas, Virgin Islands.

The Students

All sixth-grade classes, including an HC class, participated in the program. The 112 students were 11 years of age and of average achievement level. Classes met five times a week, with the exception of the HC class which met only twice a week. This program is very adaptable. Since collecting is done at home, the group can be as large or as small as desired. On the elementary school level the students can use the common terms for organisms. On the high school level students can delve deeper into scientific terminology and classifications. On the sixth-grade level, a combination is used.

The Staff

Mary Beth McCarthy developed the program, which had the wholehearted support of her supervisor and principal.

Materials and Facilities

No special equipment or location is necessary. *A Golden Guide to Weeds* and *Pond Life* were used as reference guides. A bioscope was useful.

Outside Resources

A winter field trip to a nearby pond, accompanied by a naturalist from High Rock Conservation Center, produced pond samples such as insects, clams, worms, lichens, shelf fungus, termites and carpenter ants, mosses and buds on trees. A visit to the American Museum of Natural History was similarly informative.

Overall Value

The students were excited about sending their specimens to another school, and even more excited when the box came from the other school. It is hard to imagine a more effective way of arousing their interest in scientific methodology and the wonders of the natural world about them. The collections were set out on two tables. The students came up in groups of four to identify them, and then went to their seats to answer questions and identify the biome. Most of the students identified the biome correctly and, with a clue, identified the state. One of the specimens sent was the state flower for Connecticut, mountain laurel. After the field trips the students made comments like, "I wouldn't mind having a job like that," referring to the ecologist at the museum and the naturalist from High Rock.

More Information

Mary Beth McCarthy
I.S. 7
1270 Huguenot Avenue
Staten Island, NY 10312
Telephone: 356-2314
Principal: Robert Stavrakas

James Longley

Energy for the Future

The Program

Energy for the Future is a secondary school physical science course focused on energy. Students in the course learn about the evolution of the human race in terms of its energy use. They continue by studying present energy production and consumption patterns. The last part of the course is devoted to future energy sources and uses. Problem-solving skills are also emphasized. Students learn from lectures, reading, written assignments, laboratory experiments, games, films and field trips. A text for the course has been written and photocopied for the students each of the past two years.

The Students

Energy for the Future was taught to two sections of eleven students each last year. Fifteen students are enrolled in a single section this year. Although all secondary students are eligible to take the program, most of them elect to take it in their ninth-grade year. Students in the course are generally of average achievement. They meet three times a week for the entire school year. Although the need for *Energy for the Future* at Calhoun is mainly as an option for ninth-grade science, the course could also be offered at a higher level to interested juniors and seniors.

The Staff

The program was developed by John L. Roeder, who has been involved in energy education during the nine years he has taught at The Calhoun School. He has developed curriculum for the National Science Teachers Association's "Project for An Energy Enriched Curriculum" for two summers, and has participated in various projects with the National Energy Foundation. Although The Calhoun School has supported *Energy for the Future* all four years it has been offered, it requires no more than a single teacher for its implementation.

Risa Bell

Materials and Facilities

The text, *Energy for the Future*, by John L. Roeder, contains all the elements of the course except the films and field trips. The course can be implemented in any high school science lab, and many of the experiments can be carried out in an ordinary classroom.

Outside Resources

Field trips have been taken to the Con Edison Energy Museum, Conservation Center, and 59th Street Power Plant, as well as to a local "co-op" equipped with solar heating.

Overall Value

Energy for the Future is a physical science course that, by focusing on energy, introduces students who may not become scientists to ideas of science that are relevant to their lives and to some of the future decisions they will face.

More Information

John L. Roeder
The Calhoun School
433 West End Avenue
New York, NY 10024
Telephone: 724-1980
Head of School: Neen Hunt

Research in Energy Science

The Program

Research in Energy Science is an ecology "minicourse" designed to encourage students to develop and exhibit a project proposal in the area of energy research and technology. Students attend five weekly sessions. (Three are in classroom instruction and two are in research development.) The latter include using library reference readings, energy fact-finding sheets, National Energy Foundation source material and outside contact resources. Methods of instruction in this course include developmental lessons, instructional seminars and essay- and research-writing skills, as well as required laboratory sessions and lab reports. Each student completes a term paper and/or a proposal for a research project in energy science. Sample proposals include "Photo-Electric Cells for Solar Energy," "Natural Control of Insects" and "On the Disposal of Synthetic Fibers." During the 1980-1981 school year, a student participant in this minicourse was named a finalist in SEER (Student Exposition on Energy Resources) which is sponsored by NEF.

The Students

In 1981, 65 students in the ninth grade participated in *Research in Energy Science*. The students are above-average achievers; however, this course can be modified and used successfully with average achievers.

The Staff

The program was developed and implemented by Dorothy Suecoff, a teacher with 12 years in science education. It has the full support of the principal.

Materials and Facilities

Needed for this course are a classroom science laboratory, measurement equipment (e.g., balance, measuring glassware, straight edges and graphing paper), a library, an overhead projector, transparencies and a duplicating machine.

Outside Resources

A number of outside resources are important. They include guest speakers, the public library, visits to energy utility companies, visits to the Con Edison Energy Museum, the PTA and other parental assistance, and cooperation with the National Energy Foundation.

Overall Value

This course is designed to increase the student's awareness of the current energy situation. In addition to serving as a catalyst for students to develop and apply principles of the scientific method, its interdisciplinary concepts are also valuable to students as they acquire a better understanding of the environmental and economic impact of the energy crisis. "The relevant concepts explored in this course," says Suecoff, "will deepen the perspective of the students and enable them to formulate workable solutions regarding the nation's energy future."

More Information

Dorothy Suecoff
Stuyvesant High School
345 East 15th Street
New York, NY 10003
Telephone: 673-9030
Principal: Gaspar R. Fabbricante

Science and Values

The Program

Science and Values uses simulation, role playing and creative writing to enable students to identify their own feelings and values about the effects of technology upon human lives. The first unit, Nuclear Energy, is based on seven subtopics: disarmament, waste, radiation, nuclear reactors, peaceful purposes, history of the bomb and strategic weaponry. Students are introduced to nuclear chemistry and biology, and complete both vocabulary and values tests. Resource folders for each subtopic have been constructed and graded. At this point, the class breaks up into small groups for a simulation whose objective is to draw up an American policy statement on nuclear power. Six "presidents" are chosen and provided with a set of advisors and cabinet officers. Each official, who must become "expert" in at least two subtopics, views, reads and digests both core and supplementary materials. Findings are synthesized and presented at "cabinet meetings." The "experts" receive assistance in researching problems and improving reading and writing skills. The "presidents" absorb a series of selected readings and are coached in conducting a meeting, and writing and delivering a speech. Cabinets continue to meet at least twice a week for six weeks until a policy is formulated. Speeches are written and later delivered, taped, photographed and criticized. Research is evaluated. Afterwards, students complete post-tests in vocabulary and in values. An open-ended questionnaire is coupled with discussion between the entire class and each of the three teachers conducting the program.

Unit two is organized similarly around the topic Computers and Automation in Your Future. Groups focus on the effects upon leisure, work and structure of the home. Group leaders guide their groups to write a playlet highlighting their consensus; and the playlet, with props, is performed by the entire group. Unit three, Genetic Engineering, is now being prepared for a tenth-grade biology class.

The Students

One hundred students at Queens Vocational High School, and Samuel Gompers High School in the Bronx have participated. Units one and two were developed with mixed eleventh-grade science and English classes at Queens Vocational High School. Two topics from unit one were reshaped for a general science ninth-grade class at Samuel Gompers High School. The Bronx students met for two double periods per week, over a period of seven weeks. The program can be adapted to smaller or larger groups throughout the secondary grades, and to programs in social studies and English as well.

The Staff

The initial team was composed of Barbara Hull, library media specialist; Ronald Kappraff, science teacher and chemical engineer; and Ronald Bronk, English teacher and communications specialist, all of Queens Vocational High School. All members are experienced secondary school teachers. The team demonstrated the first unit of this program at the 1981 annual conference of the New York Library Association, and at a workshop at Science Update, 1981. A workshop folder is available.

Materials and Facilities

The school library media center is the ideal setting for the simulation laboratory. Space, staff and materials are available to answer students' questions, create instructional units, use audiovisual equipment and provide instruction to small or large groups. An up-to-date clipping file and a basic reference collection are available. A camera and several advanced texts are provided by the teachers involved. All other supplies are provided by the school.

Outside Resources

Magazine articles were borrowed from the public and college libraries around the city. Slides were lent by a scientific group. Guest speakers can also enhance the program, but they are not an absolute necessity.

Overall Value

"Why bother taking science?" "What does English have to do with other classes?" "Isn't the library a boring place?" "School doesn't have anything to do with life." The program seeks to dispel such notions and get students to understand the relevance of science to their own lives and futures. It also helps them to learn how to transfer reading and writing skills, as well as experience the fun of discovering new ideas in the school library.

More Information

Barbara Hull
Samuel Gompers
Vocational/Technical H.S.
455 Southern Boulevard
Bronx, NY 10455
Telephone: 665-0950
Principal: Victor Herbert

SOCIAL STUDIES

Celebrating Women: Making Choices

The Program

Celebrating Women: Making Choices is a yearlong program aimed at raising the awareness level of all children to the realization that sex stereotyping affects one's choices in life. Each student should be able to make a personal choice in the job market based on individual talents and interests, rather than on the traditionally sex-assigned roles. The program is introduced by having each child begin a "choices log," comprising both directed activity sheets and recordings of personal experiences. The activities range from developing a family roots chart to examining attitudes in the media, writing reports on famous women, examining roles in the school environment, and analyzing television commercials. Also, student-designed posters reflecting the lives of famous women are entered in the borough president's "Women in History" contest. The students are encouraged and guided to form their own opinions concerning the treatment of females and males in books, television, school, movies and the like. The classroom environment is congruent with this unit, since children are encouraged to assume responsibilities traditionally undertaken by one sex only. Children are also encouraged to discuss experiences outside the school and to bring in articles related to sex-role stereotyping.

The Students

Classes of fifth- and sixth-grade students have participated in this program over the past three years. The classes are heterogeneous groups. The program may be adapted for all grade levels.

The Staff

Johanna M. Martines, an elementary school teacher for 13 years and a contributing editor to *Tabs: Aids for Ending Sexism in School,* introduced the program at P.S. 158 three years ago.

Materials and Facilities

The quarterly magazine, *Tabs: Aids for Ending Sexism in School* (Lucy Simpson, publisher, Brooklyn, NY), contains lesson plans, background information on famous women (accompanied by posters), current review materials and bibliographies for teachers. Activity sheets from *Choices: Learning About Changing Sex Roles* (Nancy R. Wangen and Sherri Wagner, Jenny Publishing Company, Minneapolis, MN), may be reproduced for distribution. Posters are also included in this set of materials. Materials were also obtained from the New York City Community School District 2 Women's Educational Equity Act Program. Other materials are easily found in one's everyday environment—magazines, books, newspapers, television shows, movies. Use of these materials is both possible and productive.

Johanna Martines

Outside Resources

None is needed. If it is possible, invite interesting members of the community to speak about their jobs and leisure-time activities that counteract the traditional sex-defined roles.

Overall Value

"The children's awareness of sex-role stereotyping is raised," explains Martines. "They begin to examine their own choices in life and, by the end of the school year, realize that they have many choices open to them. Just as the sign on the classroom door reads 'Welcome to an Equal Opportunity Classroom,' I believe that children whose consciousness has been raised will make for an equal opportunity world."

More Information

Johanna M. Martines
P.S. 158
1458 York Avenue
New York, NY 10021
Telephone: 744-6562
Principal: Peter Flanagan

Map and Globe Skills Live

The Program

Map and Globe Skills Live is an interdisciplinary approach aimed at helping children use map and globe skills in a natural, creative manner. Using the premise that we live in many different geographic "places" at the same time—"centers of interest"—the children are exposed to experiences verifying this. The student begins at the center of his or her own environment. Baby pictures and self-portraits are put on display in the classroom. Then, through class lessons, it is pointed out that each student concentrically lives in a borough, city, state, and country; on a continent and planet; and in the universe. The children are exposed to class maps, outline maps and factual information pertaining to the topics. This opens the door to much creative student writing and creative student artwork on each topic. Thus, a personal involvement is established for every child in relation to the many places where he or she lives. Each of these topics, in turn, becomes a center of interest around which the curriculum is integrated. For example, the study of the five boroughs of the city (social studies) culminated in having the students write autobiographies (communication arts). These autobiographies used Roman numerals for all numbers, such as age and address (mathematics), and also included illustrations (art). During the study of New York City, the children learned and appreciated Rachel Field's poem "Skyscrapers," replete with new vocabulary words. The children also painted a beautiful mural of the sights of New York City on the classroom windows. When the State of New York as a "center of interest" was studied, the class spent a week upstate in Rifton, New York at an environmental education camp sponsored by Community School District 3 and the Goddard-Riverside Community Center. The children kept journals about life in the country and all their experiences—hiking, feeding farm animals and maple sugaring. Similarly, when the United States was the "center of interest" being studied, the class learned the names of the states in a song, "Fifty Nifty United States." In addition, the study of the continent of North America was enhanced by a research unit on mammals of North America. This culminated in a classroom gallery of original paintings of those same mammals.

The Students

This program was done in a heterogeneous, vertically mixed fourth- and fifth-grade class. The children ranged in ability from above-average to below-average. All the children participated. This program can be adapted for grades four to six, in both large- and small-size classes.

The Staff

Marilyn Siegel, who developed this program, is an experienced upper-grade classroom teacher who has always been interested in a creative approach and in using the arts to integrate curriculum. The program has the support of the principal.

Materials and Facilities

No fancy materials are needed. Art supplies are obtained in the school or may be purchased inexpensively at neighborhood art supply stores. Using found and scrounged materials is encouraged. The program is run in the classroom with the use of various maps, a globe, encyclopedias and dictionaries. Some research is also done in the school library during a weekly research period. The outline maps are duplicated for class use. To help her in formulating the program, Siegel used the New York City Public Schools' publication, *Teaching Map and Globe Skills* (1960).

Outside Resources

The class takes neighborhood walks, visits the American Museum of Natural History and the Statue of Liberty, and is involved in the Goddard-Riverside Environmental Education Program. Also, a volunteer speaker from the American Museum of Natural History shows slides on mammals of North America.

Overall Value

As a result of the program, the children have a more positive self-image. There is much group interaction and a great pride in the classroom, as all the students' projects are on display. Other classes are invited to visit, along with school staff and parents. "The children," says Siegel, "have become better writers and artists. Much creativity is expressed in their work. And, naturally, the children become much more aware of where they live, and use their new map and globe skills more frequently and fluently."

More Information

Marilyn Siegel
P.S. 9
100 West 84th Street
New York, NY 10024
Telephone: 678-2812
Principal: Abraham Goldman

A Mini-Colonial Museum—Today

The Program

The program called *A Mini-Colonial Museum—Today* uses the literature, writing, art, music, poetry, architecture and dance of the early 1800s to teach New York/Bedford-Stuyvesant/Weeksville history. Students achieve a richer understanding of their own community social studies through activities and by being involved in living history. In essence, the children project themselves into the early 1800s at Colored School No. 2, which eventually became P.S. 243. In the Weeksville School (P.S. 243), the Weeksville Resource Room houses artifacts and curriculum materials from the 1967 Weeksville dig. This dig proved that the early school was part of Harriet Tubman's underground railway. A social studies curriculum has since evolved, using the community as a classroom and encompassing a totally integrated program that fosters better writing, thinking and reading habits. Students are able to participate fully in developing and preparing an on-the-road exhibit case from the Weeksville Resource Room that tells the story of this historic learning center. This specially prepared portable case contains many elements of Weeksville's history: artifacts, trade books, tintype photographs, creative poetry and stories, quilts, mathematics guides, weavings, handcrafts (students make clay models of digging tools), soap- and candle-making instructions. Reference books for future understanding will complete this learning tool.

The Students

Students working in the resource room last year ranged from kindergarten through seventh grade, with a few from junior and senior high schools. Their level of achievement ranged from above average to special education. The number of students can be expanded to as many as are necessary.

The Staff

The program was developed entirely by teachers and parent volunteers, with some assistance from the executive director of the Society for the Preservation of Weeksville and Bedford-Stuyvesant. The program has the support of the school administration but cannot be fully implemented and reach its full potential without additional support.

Materials and Facilities

This program requires the support of the administration, staff and parent volunteers to help maintain the resource room and to keep the program going. The materials, slides, prints and reference area have been developed by Marguerite Thompson, who has maintained the resource room over a period of years. The artifacts are entirely from the Weeksville digs, and the curriculum material has been developed by Thompson and the staff of P.S. 243. The creative writings that describe the program are from the children of this historic school. Newspapers, films, costumes and quilts are all a part of this community experience, which has expanded to schools within the district and throughout other districts in the borough and wider community. The program has been presented or exhibited at the Bedford-Stuyvesant Restoration Corporation, the Metropolitan Museum of Art, Fordham University and Columbia University.

Outside Resources

Thompson, along with the school community and the Society for the Preservation of Weeksville and Bedford-Stuyvesant, and parent volunteers lecture, give demonstrations and monitor the use of the display case. A newsletter will be developed by the above group for distribution to the entire community.

Overall Value

According to Thompson, "Students who have been exposed to the Weeksville historic experience seem to develop a positive self-image and to experience a greater interest in reading—and in the excitement of learning in general." A formal study, The Weeksville Study, validates this concept.

More Information

Marguerite Thompson
P.S. 243
1580 Dean Street
Brooklyn, NY 11212
Telephone: 773-2850 or 574-2404
Principal: Joyce D. Washington

Other Cultures-Other Foods

The Program

In the program, *Other Cultures-Other Foods,* children learn about foreign lands and cultures by studying local foods, preparing certain dishes and then sampling them. Through the school year, the program focuses on a different country each month. Students research the foods of each country, the ingredients used to prepare indigenous dishes, the utensils needed, and so on. The students summarize their research and write various recipes. The collection of work is included in a book that is given to each student at the end of the year. And when the food is cooked, a banquet is given for guests, parents and other teachers.

The Students

Last year 16 kindergarten children participated in this program, which has wide adaptability and can easily be used throughout the elementary grades.

The Staff

Other Cultures—Other Foods was developed by Barbara Simmons, and is implemented by her with the help of an assistant. Simmons has 11 years' teaching experience in elementary grades as well as in preschool classes. The program has support from the administration and has been used in other forms in other classes. The program can be conducted without an assistant.

Materials and Supplies

The teacher needs access to a sink, a stove, a hot plate and an electric frying pan. The latter two are usually brought from home on the day needed. Basic cooking tools and paper or plastic dishes are also needed. The teacher should use the school or local public library. A duplicating machine is also necessary to make the book that is assembled at the end of the yearlong project.

Outside Resources

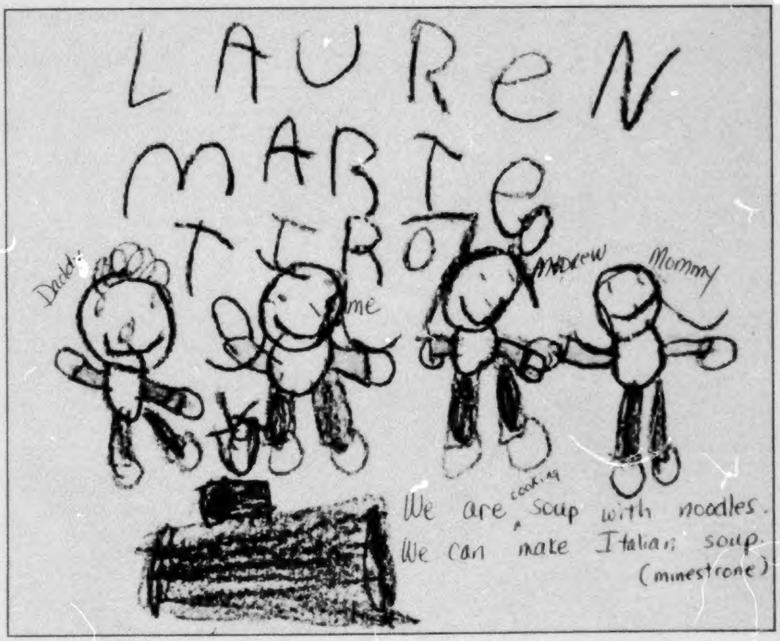
Simmons has found a wide variety of people willing to help. These include experts in the field of food, local restaurant owners, parents with special ethnic expertise and other teachers.

Overall Value

"Any curriculum project that involves making something to eat has an excitement to it," says Simmons. "Children love to prepare food and try new foods, and they are proud to participate in something 'different.' Even children who are 'reluctant tasters' enjoy the process. The study of each country ends in a feast, which involves inviting guests and a great deal of fun. And, children tend to remember facts and recall information when food has facilitated memory."

More Information

Barbara Simmons
The Berkeley-Carroll Street School
701 Carroll Street
Brooklyn, NY 11215
Telephone: 638-1703
Headmistress: Bongsoon Zubay


LAUREN
MARIE
TIROZe
Daddy
me
ANDREW
Mommy
We are cooking soup with noodles.
We can make Italian soup.
(minestrone)

Reaching Kids: Effective Communication in the Classroom

The Program

This interpersonal communications program, *Reaching Kids: Effective Communication in the Classroom*, offers young people the opportunity to interact informally, identify and express feelings, and handle day-to-day conflicts effectively. Students participate in discussions appropriate to their age groups, and are involved in supplementary activities including drama, art, movement and sensory awareness. Teachers appreciate the program's systematic approach to developing self-esteem and problem-solving and decision-making skills. They have noted increased cooperation and group cohesiveness in their classrooms. They have found that the program's structured activities promote better discussions. The program makes available to educators an extensive bibliography on humanistic education, model discussions and activities, and techniques for facilitating discussions.

The Students

Eighty fourth-graders participate in the program on a weekly basis at The Horace Mann-Barnard Elementary School. There are 10 to 15 children in a study group. At The Lenox School, approximately 20 students in the self-contained fourth-grade classroom met three to four times weekly. An ancillary summer program, *Reaching Out*, has been offered to students with varied backgrounds and achievement levels. The optimal group size is 10 to 20 children, and the program has been successful with a wide range of students. It is flexible and can be adapted to any age group or group size.

The Staff

Debbie Pincus and Rachel Ginzberg developed and implemented the interpersonal communications program, *Reaching Kids*, in 1978 at The Lenox School. As a result of student interest, they established the summer program, *Reaching Out*, which received coverage in *The New York Times* and on CBS Newsradio. The originators of these programs have offered a series of workshops for educators, "Reaching Kids: Effective Communication in the Classroom," and were recently invited to present their model for an interpersonal communications program at the Association for Humanistic Psychology annual conference. Pincus is currently teaching fourth grade at The Horace Mann-Barnard Elementary School. She received a grant from Horace Mann to write a curriculum guide on the interpersonal communications program. She is author of the book, *Interactions: Effective Communication in the Classroom*. Ginzberg is a fifth-grade teacher at The Dalton School. Before that, she was a fourth-grade teacher at The Lenox School. The program is implemented without assistance but is fortunate to have the support of administration and faculty. The program can be carried out without staff support.

Materials and Facilities

For the program to succeed, it is necessary to have a classroom with floor space large enough to seat students comfortably. Only standard classroom supplies are needed.

Outside Resources

None is needed.

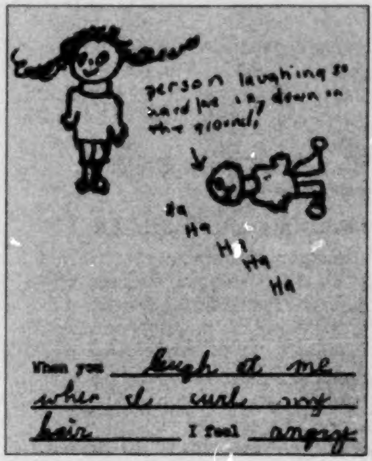
Overall Value

This interpersonal communications program enables children to work cooperatively, develop problem-solving and decision-making skills, and identify and express feelings effectively. Teachers and students benefit from the development of self-esteem and group cohesiveness. The program is innovative in that it enables students to express thoughts and feelings informally. Reactions to pertinent issues can be explored by using various media.

More Information

Debbie Pincus
Horace Mann-Barnard School
4440 Tibbett Avenue
Bronx, NY 10471
Telephone: 960-0600
Headmaster: Norman Fountain

Rachel Ginzberg
The Dalton School
108 East 89th Street
New York, NY 10028
Telephone: 722-5160
Headmaster: Gardner P. Dunnan


person laughing so hard he lay down on the ground!
Ha
Ha
Ha
Ha
Ha
When you laugh at me when I curl my hair I feel angry

Beth Smith

Remembrances of Things Past

The Program

Remembrances of Things Past is a program designed to give students a sense of history by having them help build a collection that ultimately becomes a school museum. The children gather present-day artifacts, costumes and other memorabilia for future generations to study. The museum portrays a 20-year period of the school's history. In search of artifacts for the museum, students are encouraged to investigate the school site and write letters to previous and present school personnel, pupils and parents. A recent search unearthed an assortment of old items: a 10-year-old Maypole that now dominates the museum, a sterilizer from the medical office, cleaning equipment from the custodial staff, a microscope, a "retired" flag, previous administrators' log books and students' report cards and notebooks. Also found were a 15-year-old ballot box donated by the PTA, costumes and scenery from school plays, class pictures, and a letter dated April 3, 1969 from Coretta Scott King, thanking the students for their donation to the Southern Christian Leadership Conference. Quite unexpectedly, the blue-and-white gown worn by the principal during the school's celebration of the bicentennial was discovered. The students are extending their research by using a simple camera to capture the school environment as it exists today. Each child has an opportunity to take photographs he or she deems relevant. The photographs are shared with the entire school population in a slide presentation. They are contrasted with the museum's existing slide collection which documents the distant past. All of this is highlighted in a class-produced brochure, "The Silent Guide," which outlines the exhibition. It introduces new vocabulary terms such as artifact, archives, prop, and exhibit, and presents the children's artistic impressions of the displays. Finally, a 32-foot time line summarizes the peaks of P.S. 100's 20-year history.

The Students

The entire school, from kindergarten through grade four, participated in studying the finished product. However, the students who helped develop the museum were 33 below-average fourth-grade pupils. This program can be developed with other age and ability groups.

The Staff

The program was developed by Jocelyn S. Fickling, a fourth-grade teacher. The staff of the school, including the principal, teachers, paraprofessionals and others, were solicited for artifacts, photographs and documents. Time and effort were contributed by a wide cross-section of the school community.

Materials and Facilities

An empty classroom or other available space can be used to create a museum-like setting.

Outside Resources

Museum trips are used to familiarize children with collecting and display techniques. Donations and loans made by former students, parents, teachers and others are extremely helpful.

Overall Value

'Although creating and assembling a minimuseum is quite an exhaustive and time-consuming undertaking," says Fickling, "the students benefit tremendously. Archeology is a vital key to appreciating and understanding the present. Obtaining and systematically organizing data teaches valuable research skills. These ultimately help students to recognize the contributions of others. Arranging events chronologically helps pupils to think critically. In addition, this activity fosters many social skills. The students share their findings with one another, help each other set up displays and exhibits, and serve as guides for other classes and visitors to the museum. Overall, creating a minimuseum within the school environment stimulates and enriches the students' interest in history. History, therefore, becomes a living tool."

More Information

Jocelyn S. Fickling
P.S. 100
800 Taylor Avenue
Bronx, NY 10473
Telephone: 822-5048, 49
Principal: Elizabeth Builder

WIN (Workers in the Neighborhood)

The Program

WIN (Workers in the Neighborhood) is a program that uses neighborhood resources and student skills to learn about community jobs. Each child brings to class a piece of wrapping paper approximately 18 inches longer than his or her height. The child must also have decided what community worker he or she wishes to portray; namely, police officer, firefighter, nurse, hairdresser, mail carrier and the like. The paper is unrolled and the child is asked to lie down on it so that he or she may be traced. The tracing may be done by the teacher, a student teacher, a school volunteer or another child. The child being traced must be prepared to discuss the job selection, including what the worker is going to wear. When ready to begin, the student selects the paints and starts work. It is easier to spread the painting over a two- or three-day period, doing the clothing the first day (and the second day, if necessary), and the hands, feet and head on the following day. When the "community worker" dries, it should be outlined and its clothing decorated before it is cut out. When complete, the worker may be used to decorate the classroom windows (back-to-back) and/or the bulletin boards. Meanwhile, each child should have completed a booklet describing his or her job: Of what does it consist? How does the worker dress? How does he or she help the community? Why is the job important? With whom does the worker work?

The Students

An average, heterogeneous, second-grade class studied the jobs of *Workers in the Neighborhood* as part of the social studies curriculum. The program may be adapted for use in kindergarten and in first-grade classes.

The Staff

The classroom teacher, a student teacher and a school volunteer are needed.

Materials and Facilities

The artwork is done on the classroom floor or at work tables. The materials required include brushes, paints, a sink, paper towels, crayons, scissors, wrapping paper, pencils, lined paper and a dictionary.

Outside Resources

The class takes a walking tour of the neighborhood. The tour includes prearranged visits to various places of employment, including the local precinct, a bank and the post office. Parents and friends are invited to visit the class to discuss their work and, where applicable, their uniforms.

Overall Value

Students actively generate their own learning materials. In doing so, they are made more aware of the role of *Workers in the Neighborhood* and the variety of occupations available. The program is quite effective in discouraging sexual stereotypes. Since *WIN* is a multimedia program, students are given the opportunity to develop cognitive, manual and affective skills. The interaction among the various areas developed in the *WIN* program—social studies, language arts, fine arts and career education—allows the student to participate in a total learning experience.

More Information

Debby Darby
P.S. 59
228 East 57th Street
New York, NY 10022
Telephone: 752-2998
Principal: William Aberbach

Officer
April

Debby Darby

A.C.E.S. (Affective and Cognitive Education Stations)

The Program

ACES is an organizational plan that emphasizes affective and cognitive education at individual learning stations. Students are assigned, on a daily basis, to learning stations. Each station explores a single concept, teaches a skill or reinforces some other aspect of the curriculum. Learning stations consist of independent learning activities designed by the teacher to meet the needs of the students' different learning styles or modes. Recognizing a student's "learning mode" enables the teacher to plan a program of instructional activities that can best motivate the student. A station may consist of an activity packet, manipulative materials, and/or audiovisual material. It provides for learning experiences that are challenging, stimulating and non-threatening. Independent activities are also available for students who complete all the objectives for a given activity and wish to pursue the topic. This program permits individualization in an innovative and efficient way.

The Students

ACES has been used successfully in a grade six social studies program at The Lenox School. Many stations and the basic plan have been used by teachers in grades one through eight. The number of students determines the number of stations.

The Staff

The program was developed by Joseph A. Sinsheimer, who was the director of a New Jersey state-funded program that studied teaching and learning styles. He has conducted workshops for teachers, parents and school boards. The developer has also acted as consultant to districts after they received grants to adapt his ideas to meet their needs.

Materials and Facilities

The setup of the program is so flexible and cost-efficient that any teacher can introduce it into a class.

Outside Resources

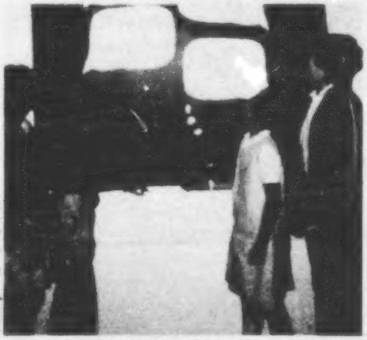
These are up to the individual teacher.

Overall Value

According to program developer Sinsheimer, "Many teachers are philosophically dedicated to providing an educational program of such diversity and scope as to challenge and satisfy the needs, interests and abilties of all students. This program enables students to reach program objectives at their own rate and within their learning style. It's a commitment to an interdisciplinary approach to education."

More Information

Joseph A. Sinsheimer
The Lenox School
170 East 70th Street
New York, NY 10021
Telephone: 288-4778
Headmaster: Colin Reed



Joseph Sinsheimer

Ditmas Law Studies

The Program

Ditmas Law Studies is an activity-oriented program that develops for the student the general principles of law, practice in writing and research, and knowledge of courtroom procedures. The program introduces students to landmark court decisions, legal precedents and in-court activities. Students participate in mock trials, meet with lawyers in the classroom and visit the courts. Selected students work under the supervision of a criminal court judge in an internship program. Ditmas Law students and teachers prepare a special Law Week Program for the parents and community, including a Law Night. Currently, the program utilizes self-contained classrooms, small-group activities, simulations, three-day teaching units and two-week mock trials for use in regular social studies classes,

The Students

The current law program consists of three ninth-year classes and one eighth-year class, totaling 120 students. Two of the classes are above-average and two are average. In general, this program is best suited to students in grade eight and above; also students who are on or above grade level in reading. Students below grade eight have been involved as jurors and spectators. Eventually, the program developers hope to involve elementary school students in minicourses conducted by the Ditmas Law students.

The Staff

The program was developed and implemented by Carol DiStefano, with the assistance of Lois Zarka. DiStefano, a social studies teacher. became interested in law education, took courses, read extensively, and attended several conferences and a two-week workshop related to law studies She has been a teacher for 16 years, working with both slow and gifted students, and helped establish a humanities program in the school. The program operates without non-professional assistance and is directly supervised by the school principal. The district superintendent has endorsed the program and allocated a $500 start-up expense fund to assist initial implementation. The program can generally operate within the normal school budget.

Materials and Facilities

J.H.S. 62 is in the process of converting one of its largest classrooms (28 by 48 feet) into a Courtroom-Law Library Center. Blueprints and plans have been drawn up calling for a study center, judge's bench, jury box, witness stand and spectator's gallery. Trial materials include tape recorder, ditto equipment and rear-screen projector with sound.

Outside Resources

Outside resources in the *Ditmas Law Studies* program include meetings with criminal and civil court judges, the 70th police precinct, lawyers, parent volunteers; the facilities of Brooklyn Assemblyman Mel Miller's offices; and advisory support from the Flatbush Development Corporation and the Honorable Jack Gold. The program also includes a student internship program organized by Judge L. Rosenthal of Brooklyn Criminal Court.

Overall Value

Says the developer: "In today's complex society, the law is everyone's business. Hardly a day goes by that we aren't touched by it in some way. Students, as part of society, also come into frequent contact with matters related to the law, even if only in the various news media. Junior high school students are intensely interested in people, and particularly people in stressful situations. Law provides many opportunities to come into contact with such situations. For this reason alone, it is naturally a motivating strategy for instruction."

More Information

Carol DiStefano
J.H.S. 62
700 Cortelyou Road
Brooklyn, NY 11218
Telephone: 941-5450
Principal: Edward Stern

HON. STACY FIORILLO

Aaron Fox

Environmental Exploration and Exchange Program

The Program

Environmental Exploration and Exchange Program uses New York City as a learning resource, with the ultimate goal of understanding how it functions and how it is vastly different from a country environment. The program has two components that are related. In the first phase, the students study the past, present and future of their local environment. Then, through explorations of the city, students identify places and themes for in-depth study. The students usually work in small groups on themes such as housing, transportation, recreation, local government, geography (a heavy emphasis on mapping) and neighborhood cultures and history. Group work is stressed to enable students to learn to work collaboratively and with respect for each other's input. At the same time, individual responsibility within a group is emphasized by the teacher. In the work, a number of basic and research skills are used, such as interviewing, data collection and library research. Each student is responsible for keeping an up-to-date journal on the progress of the group's work and his or her own work within the group. All experiences (such as field trips) are recorded in this journal. The journal helps students recall relevant information that is vital to the second component of the program, the correspondence and the exchange.

The correspondence portion of the *Environmental Exploration and Exchange Program* involves the class in a pen-pal relationship with a class of children from a rural environment. Throughout the year the children correspond with each other. Their intention is to convey a sense of their environment to children from an environment which is radically different. At the end of the year there is an exchange; the children from the country visit their pen pals in the city, and the city children go to the country.* Both correspondence and exchange function as motivators for city children exploring, studying and discovering their own urban environment.

The Students

Three classes of seventh- and eighth-grade students participated in the program last year. The classes varied from average to above-average achievement levels.

The Staff

Pape developed the program with the assistance of Cecilia Perez of the Center for Human Environments, CUNY. The program, however, has a simplicity and clarity that allow for teacher replication without support.

Materials and Facilities

There are no particular materials or facilities that are required for this program, although paper, pencils, dittos, cameras, film and simple construction materials are useful.

Outside Resources

The exchange portion of this program is an expense. However, the program can be successful even without the exchange since the correspondence component is an equally important motivator for children studying their urban environment.

Overall Value

This program is valuable for several reasons. It gives students a basic, firsthand understanding of the complexity of the city. Their study group becomes a microcosm of how groups and organizations interrelate and function. The program teaches reporting and investigating skills in an on-the-job way. And it creates in students surprisingly strong feelings of pride for their city. "When they know strangers will be listening," says Pape, "they find the good parts."

More Information

Norman Pape
Academy of Environmental Sciences
1700 Third Avenue
New York, NY 10028
Telephone: 860-5979
Director: Cole Genn

---

* All-Towns Teachers Center is a Vermont organization of six towns established to encourage student exchange visits. Teacher Norman Pape arranged his exchange program through this organization. Students visited pen pals in Halifax, Readsboro and Whitingham (all in Vermont). Funding was provided by a grant from CUNY Center for Human Environments. The most recent visit (spring, 1982) was to Alstead, New Hampshire. Bus fare was provided by parents.

Making the Humanities Meaningful:
The Relationship Between Art and Society

The Program

This is a program in cultural history that shows students how to analyze works of art (primarily painting, sculpture, and architecture) on the basis of style, imagery, and historical context. *Making the Humanities Meaningful: The Relationship Between Art and Society* requires students to think in oblique and subtle ways, extracting a variety of meanings from works of art. Students must discover what it is that makes a work of art peculiar to its historical period. To make this objective more concrete, students are given a series of questions that a cultural historian might ask. The questions cover four areas: society's influence on the personal and professional life of the artist; society's response to the work of the artist; the response to society in the artist's work; and the artist's place in the history of others in the same field. Students are introduced to this method in specific lessons, with titles like, "Romanticism, Nationalism, and Liberalism"; "Pop Art: Warhol, Marcuse, and McCluhan"; "Islamic Art: A Study in Eclecticism"; and "The Agrarian Myth and the Hudson River School." Students write essays and research papers placing art in a broad historical context and, in the case of the eighth grade, they even perform a didactic play that is illustrated with slides of eighteenth-century painting and architecture.

The Students

Since lessons have been designed for history as well as art history classes, over 175 students from grades 6 to 12 were exposed to the program last year. This includes classes in European history, American history, medieval history, Middle Eastern studies, and art history. At the most advanced level, students take the advanced placement exam in art history. Class size is no limitation.

The Staff

The program was developed by Christine P. Naitove, who teaches art history, philosophy and history. Within the past three years, several other teachers have implemented her lesson plans in ninth-grade European history.

Materials and Facilities

The school must have appropriate art slides, a slide projector and dittos for students.

Outside Resources

Field trips to museums are an essential part of the program.

Overall Value

This program provides students with concrete experience in interdisciplinary thinking, and shows them how art can affect politics and social values—and *vice versa*.

More Information

Christine P. Naitove
The Chapin School
100 East End Avenue
New York, NY 10028
Telephone: RH4-2335
Headmistress: Mrs. Charles G. Berendsen

P. Ogden

A Trip Through the 20th Century with Music

The Program

A Trip Through the 20th Century with Music is an interdisciplinary program that teaches students about the different sociopolitical eras of the 20th century. Along with selected reading, pictures and eyewitness accounts, music is utilized not only to bring out the facts about each era but also to create in each student an empathic reaction to that period of time. By taking a decade, such as the 1940s, the students can be transported back in time, through newspaper headlines and stories by and about people who lived then. The music of the era then ties up all the facts into an experience easily understood and felt by all. Students can ultimately compare one era with another, learning the unique qualities of each and studying how each one influenced the development of those following. For example, the *New York Herald Tribune* December 8 headline, "Japanese Bomb Pearl Harbor/Congress Declares War by Vote of 470 to 1"; the book, *From Here to Eternity*, by James Jones; and the song, "Don't Sit Under the Apple Tree With Anyone Else But Me," bring back the feeling of World War II.

The Students

This program can be adapted to any level above the middle elementary grades. Students meet once a week, and groups can be small or large, depending on teacher preference.

The Staff

The teacher should have a knowledge of the different social and political eras of the 20th century. He or she should be someone with an appreciation of music and a working knowledge of 20th-century music.

Materials and Facilities

Needed for this program are an empty classroom, a record player and records, slides or pictures, and a slide projector.

Outside Resources

Volunteers, such as parents or grandparents, who would like to come in and speak about life during a certain era are extremely helpful.

Overall Value

A Trip Through the 20th Century with Music has widened the horizons of students, according to Jon Drescher, who developed the program. "They have developed an appreciation of music from past generations," he says. "They have acquired a sense of the past and a feeling of the past that did not exist before. They have learned to draw analogies between the present and the past, and are now speculating on the future. And they have learned how music shapes and is shaped by the sociopolitical climate of the time."

More Information

Jon Drescher
Harbor J.H.S.
240 East 109th Street
New York, NY 10029
Telephone: 860-8947
Director: William Colavito

Understanding History

The Program

Understanding History is a program that centers on four elements of history which are demanding and engaging for students: important people, pivotal events, major themes and power relations of a historical period. Students are challenged to think as historians would, to link people to events, to tie events to themes, to describe power relations and to draw historical analogies. The four elements require students to treat a historical period as a puzzle, rather than as a miscellaneous set of facts. Each element also requires reading and writing, and provides students with ample note material for essay questions and tests.

The Students

This program has been used successfully in an eighth-grade ancient history course with 14 students. Use of the four historical approaches can be adapted to other history courses, lower grades, and larger groups.

The Staff

This program was developed by John Ramsay, who has taught history on a number of different levels for several years. He works with the approval of the department chairman and headmaster, and requires no assistance.

Materials and Facilities

The four classroom activities in this program can be adapted to instructional materials available at particular schools. A good school library is quite helpful, and a ditto machine is necessary.

Outside Resources

None is needed.

Overall Value

Says developer Ramsay: "I find that focusing on these four elements of history stimulates classes, provides challenging homework assignments, and generates course notes. The activities in this program are alternatives to traditional approaches, and increase rather than sacrifice intellectual vigor."

More Information

John G. Ramsay
The Collegiate School
241 West 77th Street
New York, NY 10024
Telephone: 873-0677
Headmaster: Richard Barter

Urban Architecture through Oral History and Photography

The Program

Urban Architecture through Oral History and Photography uses community resources to teach urban studies and language skills and to foster civic pride. Parents, grandparents, civic leaders and community members-at-large are invited to speak about their community, past and present. These informal talks are tape recorded and provide a living history of the locale. Participants conduct walking tours, noting locations of landmarks, churches, schools, hospitals, museums, parks, bridges and interesting buildings. A large neighborhood map is developed, indicating buildings that merit further study. Students keep a log and produce a slide show reflecting the richness and diversity of their community, as well as plans for its future development and solutions to local problems.

The Students

This program was originally conducted with 30 above-average fifth-graders. Last term the program was adapted for a seventh-grade Gates class. It can be used in small or large group settings and is applicable for all levels of achievement.

The Staff

Denise Levine, a 10-year teaching veteran, developed this program as an outgrowth of a hobby. The program had the support of the school's director and the district curriculum specialists, but can be run without additional support.

Materials and Facilities

To be successful, this program needs a camera, a cassette recorder, some blank cassettes and use of a library. Instructional materials developed for *Urban Architecture* include a list of themes for architectural walks, sample worksheets, news clippings and a glossary of architectural terms. An extensive bibliography is available upon request.

Outside Resources

These include local citizens as guest speakers, neighborhood walks, field trips to the Museum of the City of New York, Cooper-Hewitt Museum, El Museo del Barrio and the New York Historical Society. The American Institute of Architects in Washington, D.C. is also an invaluable resource.

Overall Value

This program fosters community pride and offers real solutions to local problems. Parents are delighted because it helps to bridge the oft-noted generation gap and strengthens family ties. Students produce a photo scrapbook or slide show and write journals that enable them, their parents and the teacher to see the progress they are making with writing skills. Many of the students discover the hobby of photography and develop a new awareness and understanding of architecture and design.

More Information

Denise Levine
B.E.T.A. School
410 East 100th Street
New York, NY 10029
Telephone: 860-3922, 8926
Principal: Mary Romer-Coleman

A Visual Approach to History

The Program

A Visual Approach to History uses old photographs of New York City as a springboard to teaching social studies. According to program developer Ruth Lessuck, there are several strong reasons why. Children take great pleasure in looking at old photographs; such photographs often communicate the feeling of a period more easily than the written word; historic photographs introduce a different dimension to the study of history (children begin to wonder what it was like to be a child, a woman, a member of a minority group, a worker at a given period of time); and these old pictures offer childen a greater latitude than the written word in raising historical questions. The program has a two-part curriculum.

The first part of the curriculum involves studying historic photographs in the classroom. Two examples are pictures of Mulberry Bend in the 1890s, before it became part of Chinatown; and 96th Street and Third Avenue in 1900, when the area was farmland. (All xeroxes of old photographs are made by Lessuck.) Considerable work is done comparing then and now photos of the same geographical area. Children almost automatically raise interesting historical questions and begin to do photo-research and oral history, quickly developing a genuine interest in the study of history.

The second part of the curriculum has developed from an observation by Lessuck about the photo archives in New York City. "There is a serious gap in these archives," she says. "There is very little visual material reflecting low- and middle-income areas in our city. My students, therefore, begin to photograph their neighborhoods, knowing, that over time their photographs may constitute an important historical record of our city. Children, in other words, act as historians with a real task to accomplish." The program, in short, explores the use of the visual in the child's study of history.

The Students

Lessuck developed and implemented this program with a single class of below-grade-level students at the Academy of Environmental Sciences. The visual emphasis is particularly helpful with students whose learning pace is slower.

The Staff

The curriculum was developed with the assistance of Ester Brumberg, former photo librarian at the Museum of the City of New York. The program, however, does not require additional support now that the concept has been developed.

Materials and Facilities

There are no particular materials or facilities needed for the project other than camera, film and slide projector.

Outside Resources

The Museum of the City of New York, the New York Historical Society, and the New York Public Library are excellent resources for visual material.

Overall Value

"This approach is highly successful," says Lessuck, "because history becomes relevant to the students. Children tend to be media-oriented through television, magazines, newspapers and films. This program gives the students the opportunity to improve their visual literacy and develop a sense of history. The program lets students view history in a more realistic way, with real improvement in their sense of events and of time. It also creates excitement in the classroom because children draw from what they already know in order to explore unfamiliar areas."

More Information

Ruth Lessuck
Academy of Environmental Sciences
1700 Third Avenue
New York, NY 10028
Telephone: 860-5979
Director: Cole Genn

You and Others

The Program

You and Others is a program that encompasses group dynamics, communication skills, study skills, drug education and sex education. It begins with exercises that promote a sense of group identity and cooperation. Then methods of self-protection are discussed. Basic study skills are developed for the next month to six weeks, at which point the focus shifts to drug education, starting with a film and discussion on alcoholism. The last section explores the topic of human sexuality. Time is available throughout the year to respond to other concerns identified by the students as they arise.

The Students

This program could be adapted to grades five through eight, although up to now it has been used only with bright seventh-graders, all of whom are between 11 and 13 years of age. It is designed for small-group discussion, so the class should be no larger than the present size of 15.

The Staff

You and Others has been developed and taught by Barbara Lanckton-Connors, a guidance counselor, who has also been a teacher of reading, study skills, and American history. The program uses outside speakers and is endorsed by the school administration. No other staff members are needed beyond the one trained teacher who organizes and leads the course.

Materials and Facilities

The course can be taught in any room that seats 15 students and the teacher. (In the first year, meetings were held in the school cafeteria.) A small room works best because it promotes open discussion. Several books and mimeographed handouts are used, but few of them are really necessary because the questions asked by the students are the real foundation of the course.

Outside Resources

You and Others has had guest speakers and free films from both the auxiliary police force and the Junior League. These speakers have led discussions on self-defense and on alcoholism.

Overall Value

By creating a forum for discussing the concerns and questions that are important to young adolescents, *You and Others* provides a context for a convincing drug education and sex education program. Students are given many opportunities for determining the direction of the course. By combining cognitive and affective learning, the program stimulates positive social and interpersonal relationships for this age group.

More Information

Barbara Lanckton-Connors
Columbia Grammar and
Preparatory School
5 West 93rd Street
New York, NY 10025
Telephone: 749-6200
Headmaster: Richard Soghoian

Exploring "Intergenerational Prejudice"

The Program

Exploring Intergenerational Prejudice uses a list of 84 attributes or traits that students and parents apply to 10 racial and ethnic groups, to determine which generation is more prejudiced. Students are surveyed at the beginning of the program and again at the end, to determine whether there has been a reduction in their level of prejudice. The teacher encourages critical thinking so that students may become more discriminating and not prejudge someone from a different group. Role playing may also be used to create some empathy in students for persons who come from groups or subcultures different from their own.

The Students

Last year 600 students participated in the program. They were 11th- and 12th-graders ranging in age from 16 to 19. These students can be described as mostly average to above-average in terms of level of achievement. The class meets five periods per week. This program can be adapted for freshmen and sophomores and, to some extent, for students who are below average in achievement. It also can and will be adapted for a much larger group (7,000 students and parents).

The Staff

Clifford Goldsmith developed the program and implements it. He has been teaching social studies for 15 years, and psychology for the last 10 years. The program needs some assistance that can be provided by volunteers. Goldsmith has also received much support from the department chairperson. The program cannot be implemented without this support.

Materials and Facilities

The program requires mimeograph paper, punch cards and a filmstrip set. There is no simpler or alternative way of implementing the program. The program uses materials from various psychology books and filmstrip sets (for example: *Exploding Prejudicial Myths: Psychology for You* by Gordon; *Psychology: Understanding Ourselves and Others* by Tallent and Spungin; and *Psychology* by Engle and Snellgrove).

Outside Resources

The only outside resources needed are guest speakers.

Overall Value

"In a pluralistic society that is becoming more polarized," says Goldsmith, "the school can play an important role in reducing ethnic and racial tensions. *Exploring Intergenerational Prejudice*, which is a step in the right direction, is basically simple to implement, requiring a minimum amount of support."

More Information

Clifford Goldsmith
John Bowne H.S.
63-25 Main Street
Flushing, NY 11367
Telephone: 263-1919
Principal: Pearl M. Warner

The New Archaeology:
An Added Dimension in Secondary School Curricula

The Program

The New Archaeology: An Added Dimension in Secondary School Curricula is a program designed to dispel current misconceptions about archaeology. The main project is a sourcebook for teachers who wish to incorporate a more realistic understanding of the field into their curriculum, either through a course in archaeology or by means of individual units adapted to existing courses. The approach of *The New Archaeology* is holistic; instead of the more traditional emphasis on components of culture in isolation, the program focuses on cultural patterning, particularly the everyday lifestyle of the common person. The program is flexible, and can be adopted in its entirety or integrated into existing courses such as ancient history, European history, world cultures, anthropology, comparative religion, art history and humanities. Each lesson plan is supported by a list of objectives, student readings, teacher instructions, bibliographies, a list of suggested materials and/or teaching aids, and a list of additional topics that can be reasonably adapted to the objectives. Projects within the program are varied. Students recreate Heinrich Schliemann's search for Homeric Troy; examine competing theories explaining the origins of agriculture in the old world; and study trade patterns in the Mediterranean during the Bronze Age by examining an underwater site. Lesson plans include such topics as new and old world archaeology. They stress different archaeological techniques and rely on a variety of teaching methods.

The Students

The New Archaeology is a one-term course that meets four times a week for approximately 15 above-average, upper-school students. It can be adapted for average students and for larger or smaller groups. Although it is primarily intended for grades nine through twelve, many of the ideas can be applied to grades six through eight, particularly grade six ancient history.

The Staff

The course was developed by Jacqueline Perchick, who has had archaeological field experience, academic preparation on the university level, and both curriculum development and formal grant experience. Consultants on the project include professional archaeologists, museum educators, university professors, and secondary school educators with experience in curriculum development. The program can be implemented without assistance by any social studies teacher following the curriculum guide. No prior experience in archaeology is necessary.

Materials and Facilities

Reproducing facilities and slide and movie projectors are needed, depending on the individual teacher's approach.

Outside Resources

The program can include field trips to museums and local archaeological sites and guest speakers, depending on the needs of the teacher. Suggestions and instructions for successful integration of the program into the curriculum are provided.

Overall Value

Says Perchick of *The New Archaeology:* "These lesson plans give students realistic exposure to an exciting and timely subject, through a single unit within an existing course or as a separate course. Active participation through inquiry motivates further study and improves analytical skills."

More Information

Jacqueline Perchick
The Spence School
22 East 91st Street
New York, NY 10028
Telephone: 289-5940
Acting Headmistress: Margaret A. Johnson

Jacqueline Perchick

Project LIST'N
(Lewis Interviewing Statespeople by Telephone Nationwide)

The Program

Project LIST'N increases auditory skills by having students conduct telephone interviews with well-known Americans on social issues. There is strong evidence that many students are deficient in listening skills. This project seeks to increase the auditory skills of students in three social studies classes. Techniques successfully developed here can be applied easily to other social studies classes. Students are strongly motivated by listening to the voices of important people brought into the classroom through an amplified telephone system. Prior to each telephone conversation, students prepare a broad general outline of the major topics that the interviewee might be expected to discuss. They are told that, following the call, they will be expected to discuss details of the conversation. Those able to capture in their notes some of the comments and ideas from the telephone conversation contribute most to the class discussions. The students are also given a listening guide on paralanguage (a person's voice characteristics) to help them select the most important points made during the interview.

The Students

Eighty students participated this term. One class was in "Women in History" and the other in "You and the Law." Both classes were composed of twelfth-grade students. This program was aimed at seniors to increase their political savvy before they were eligible to vote, but the process could and should start earlier.

The Staff

William Dobkin, assistant for social studies, and Kenneth Goldstein, teacher of "You and the Law," developed the technical aspects of the program. Joyce Prenner, teacher of "Women in History," arranged for many of the interviews. Police Officer Ray Ridulfo, who teaches a "Police and Crime" course with Goldstein, helped to arrange for interviews involving the law.

Materials and Facilities

Project LIST'N takes place in an ordinary classroom. The only equipment needed is a speaker phone. However, if a school has a spare amplifier and telephone, an adapted system can be set up.

Outside Resources

The success of *Project LIST'N* depends on the willingness of well-known Americans to be interviewed. In the spring semester of 1982, we obtained the participation of District Attorney John Santucci of Queens, Police Commissioner Robert J. McGuire and Phyllis Schlafly, the anti-feminist. Earlier in the term, advocates of E.R.A. were interviewed.

Overall Value

"We are very optimistic," says Dobkin, "that students in *Project LIST'N* and in the schools that replicate this program will benefit immeasurably. They will not only learn social studies content, but will have developed an important social skill—listening."

More Information

William Dobkin and Kenneth Goldstein
Francis Lewis H.S.
58-20 Utopia Parkway
Flushing, NY 11365
Telephone: 357-7740
Principal: Melvin Serisky

Terry Sheehan

Using the Interdisciplinary Approach to Personalize the Holocaust

The Program

This program, *Using the Interdisciplinary Approach to Personalize the Holocaust*, is designed to facilitate the teaching of the New York City Holocaust curriculum. As indicated in the foreword to the curriculum, the magnitude of these catastrophic events makes it difficult for students to comprehend and for teachers to approach. Yet the core of good learning, indeed the function of good teaching, is to provide opportunities for students to understand events that are often remote from their immediate lives. Thus, the teaching of the Holocaust cannot be limited to labeling, statistical enumerations or simple explanations. If students are to realize the universal aspects of this period, they need to explore the human dimension and to be able to personalize their learning experiences. The program, particularly by focusing on individual accounts of the Holocaust victims, provides students with opportunities to learn and to reflect on the implications these experiences have for their lives today.

The program has three components. First, students are introduced to the overall historic period through primary and secondary sources. They read, discuss, analyze and research these sources. This enables them to judge on their own, the available evidence. They present their research findings in both oral and written reports. A set of lesson plans providing background information and teaching strategies is available upon request.

A second component focuses on individual accounts of a significant chapter of the Holocaust, the uprising of the Jews in the Warsaw ghetto against the Nazis. Through a powerful documentary filmstrip, students focus on the life of a 17-year-old girl who was a fighter in the Jewish underground. They learn from her experience of the moral and physical courage it took to survive under the Nazis. The intimacy of the personal account moves students to raise many questions. These questions form the basis for additional research and interviews of guest speakers. A teacher film guide that includes film quotes, discussion questions, chronology, glossary and bibliography is available.

In the concluding component, students are provided with opportunities to develop both expositive and imaginative writing skills as they express their views and feelings about the subject matter. Their compositions include diary entries, poetry, letters, play scripts and short stories. Infused in their poignant expressions are feelings of love and compassion for those who suffered and perished, and an appreciation of the freedom they enjoy in this country. Sample student work is available upon request.

The Students

Sixty-five tenth-grade students participated in last year's program. The classes met for a period of 40 minutes each day. The program would also be successful with mature junior high school students.

The Staff

Evelyn Becker runs the program. She is an experienced high school social studies teacher, and was the initial author of the New York City Holocaust curriculum. Her program has received the support of the principal and the assistant principal of English and social studies.

Materials and Facilities

The program requires a standard classroom equipped with a filmstrip projector and a cassette recorder.

Outside Resources

Guest speakers were members of the school faculty. There are outside agencies that will also provide speakers, such as the American Federation of Jewish Fighters, Camp Inmates and Nazi Victims, 505 Fifth Avenue, New York City. The sound filmstrip used in the program is "Warsaw Ghetto: Holocaust and Resistance." It is available from the Jewish Labor Committee, 25 East 78th Street, New York City. The autobiography of the young girl, Vladka Meed, who narrates the film, is also available from the above source. It is entitled *On Both Sides of the Wall*.

Overall Value

"The very nature of the Holocaust period," says Becker, "can inhibit teachers from effectively teaching this painful subject. However, the humanistic approach of the program can help overcome some of this reticence. It filled me with hope to note that, throughout the various learning experiences, my students did not despair but responded with hope and courage. In many of their writings they identified with the positive values of the children of the ghettos and the camps. They expressed the desire to grow up and build a world of beauty, and human decency, and one in which the horrors of the Holocaust will never again occur."

More Information

Evelyn Becker
Herbert H. Lehman H.S.
3000 East Tremont Avenue
Bronx, NY 10461
Telephone: 824-0500
Principal: Robert Leder

Practical Law: Rules and Rights for Everyday Living

The Program

Practical Law: Rules and Rights for Everyday Living gives practical training to special education students in creating respect for the rights of others. It also seeks to explain the rights granted to an individual under the various levels of the law. It attempts to improve the image of authority which such students must deal with at home, at school, in employment, as consumers and as citizens. The instructional materials used are "high-interest, low-level" case studies, situation analysis stories, and informational texts geared to teen-age students. The students formulate legal glossaries and experience the legal process, firsthand and vicariously. Central to this process are their field trips to Queens criminal court. There, students observe arraignment and sentencing hearings, meet with assistant district attorneys and interview court guards.

The Students

The program has a target population of up to 15 high school students in a special education setting. The students, who range in age from 15 to 21, have a variety of handicaps and do not have the usual options for elective courses.

The Staff

This program was developed by Elaine Robinson, special education teacher. She has a background and expertise in teaching mentally and physically handicapped students, and experience with disadvantaged youths on the junior high, high school and college preparatory levels. She also has experience in teaching many life-skill areas of the curriculum.

Materials and Facilities

The program is taught to special education students in a classroom setting in a comprehensive high school. The general facilities of both the school and the special education department are available for use in this course. They include the library, audiovisual equipment, duplicating machines, paper, textbooks, television set and videotape playback equipment for viewing material such as "People's Court." The program also makes use of the telephone and tape recorder, for listening to legal tapes that are available through the New York City Consumer Law Tape program. Instructional materials include such pertinent books as the *Law in Action Series* (2nd edition); Linda Troika and Jerald Nudelman's *Taking Action;* and John Hanna's *Teen-Agers and the Law,* Ginn & Co., 1972.

Outside Resources

Field trips to courtrooms, judges' chambers, and prison or other correctional institutions are scheduled. Guest speakers are drawn from the New York City Police Department, Auxiliary Police Force and Fire Department. Other resources include drug rehabilitation and alcohol control counselors. Loans for the program can be obtained from the New York City Consumer Protection Agency. Use of the school and public libraries is encouraged. Areas in the fields of the law that offer career opportunities are also presented.

Overall Value

This course approaches law-related education with a logical, simplified, practical view of legal issues, the government's role and consumer education. It develops critical mental skills, as well as effective communication and the group work skills that special education students require. Handicapped students can take responsibility for solving their own problems. Emotionally handicapped students and those with learning difficulties, who tend to act impulsively, can learn to think ahead to the consequences of their actions. These special education students are encouraged to think of themselves as active participants in an economic and legal system which is constantly changing and expanding. Conflict resolution is explored in a context with which special education students can readily identify. "In short," says Robinson, "handicapped students can enjoy studying the law and improve attitudes and skills while they do so."

More Information

Elaine Robinson
Benjamin Cardozo H.S.
57-00 223rd Street
Bayside, NY 11364
Telephone: 631-4880
Principal: Bertram Linder

Impact II Review Committee

Kate Bressler
P.S. 14Q-Special Education

William Brown
Horace Mann-Barnard School

Stewart H. Cohen
P.S. 270-C.S.D. 13

Betty Mae Cronheim
The Midtown Ethical Culture School

Rosa C. DuCree
P.S. 155-C.S.D. 23

Lila Edelkind
P.S. 152-C.S.D. 22

Eilene Evans
P.S. 127-C.S.D. 20

Richard Flanagan
Trinity School

Sandra Genzelman LaPeter
Samuel Gompers High School—Bronx

Sylvia M. Grace
Division of Special Education—Speech Services Unit

Sheila Gutter
John Adams High School—Queens

Michael Haas
South Shore High School—Brooklyn

Sonia R. Harding
I.S. 59-C.S.D. 29

Irma Jarcho
New Lincoln School

Julia Ann Merker
William Grady Vocational-Technical High School—Brooklyn

Jean Reeve Oppenheim
Friends Seminary

Rita Pochter
Canarsie High School—Brooklyn-Special Education

John Poreba
P.S. 97-C.S.D. 1

Tom Regan
JHS 189-C.S.D. 25

Esther Rosenfeld
Fordham/District 3 Training Center—Manhattan

Edson Scudder
United Nations International School

Bertha Spielman
P.S. 114-C.S.D. 27

Mary Spilotro
New York School of Printing—Manhattan

Phyllis Wallach
I.S. 246-C.S.D. 17

Nina Wasserman
P.S. 131-C.S.D. 15

Participating Teachers

Participating Teachers	Page
Adams, Sandra	64
Alden, Renato G.	76
Anglisano, Antoinette	42
Arian, Lisa D.	49
Backer, Gail	74
Becht, Joan M.	25
Beck, Mildred	75
Becker, Evelyn	119
Berman, Norman	12
Birnbaum, Nina N.	40
Boccasino, Rose	43
Brick, Barbara	89
Campisi, Frank	57
Charlton, Alice	15
Darby, Debby	106
DiStefano, Carol	108
Dobkin, William S.	118
Domingo, Daniel L.	39
Drescher, Jon	111
Eill, Bryna	13
Everdell, William R.	56
Fickling, Jocelyn S.	105
Fielman, Fred	23
Fonollosa, Joyce	18
Fox, Sylvia	14
Genova, Laura J.	20
Ginzberg, Rachel	104
Goldsmith, Clifford	116
Goldstein, Kenneth	118
Gonzalez, Margaret	62
Gottfried, Jody	84
Gross, Robert	48
Grossman, Sari	10
Guage, Teresa P.	19
Haller, Elizabeth	70
Hoffman, Delores	77
Horne, Esther R.	91
Hull, Barbara	98
Kirsch-Pretl, Karla S.	66
Lambright, Marilyn	26
Lanckton-Connors, Barbara	115
Lanier, Madi	9
Larkin, Sharon A.	31
Lee, Gattlen	32
Lessuck, Ruth	114
Letteron, Edward H.	45
Levine, Denise	113
Levinowitz, Les Alan	80
Levinsky, Neil S.	50
Levinson, Naomi	47
Levy, Suzanne	38
Liotta, Philip	90
Mandel, Marilyn	72
Martines, Johanna M.	100
Mayers, Arlene I.	88
McCarthy, Mary Beth	95
McCormack, Joan P.	33
Meeh, Martha	73
Meehan, Bryn	121
Miles, Barbara J.	22
Molinelli, Rose P.	68
Naitove, Christine P.	110
Nicolardi, Paul	52
Pape, Norman	109
Paris, Frances	54
Perchick, Jacqueline	117
Pflaum, Jeffrey	30
Pincus, Debbie	104
Platzman, Sandra	87
Ramsay, John G.	112
Robinson, Elaine	120
Roeder, John L.	96
Rymer, Judith	36
Salzman, Marc	46
Santiago, Gloria	18
Schulhof, Carol	93
Scieszka, Jon	34
Seifman, Sam	27
Selsky, Judith	81
Shuller, Nancy	34
Siegel, Marilyn	101
Simmons, Barbara	103
Sinsheimer, Joseph A.	107
Spears, Brian	85
Spinetta, Virginia	65
Stecker, Marcia	41
Sternberg, Frances Rose	94
Stone, William	53
Suecoff, Dorothy	97
Tannebaum, Charles F.	58
Thompson, Barbara	35
Thompson, Marguerite C.	102
Townes, Caroline	37
Tucker, Reevan M.	92
Turian, Donna	44
Uhry, Joanna	35
Weiss, Diane	8
Weiss, Eliot	59
Williams, Leoma	24
York, George T.	11
Zlotowitz, Debbie	51

Index by Borough and School District

District No.	Name of Teacher	School	Page
MANHATTAN			
C.S.D. 2	Birnbaum, Nina N.	P.S. 6	40
	Darby, Debby	P.S. 59	106
	Horne, Esther R.	P.S. 2	91
	Larkin, Sharon A.	P.S. 130	31
	Lee, Gattlen	P.S. 2	32
	Martines, Johanna M.	P.S. 158	100
C.S.D. 3	Gottfried, Jody	P.S. 75	84
	Siegel, Marilyn	P.S. 9	101
C.S.D. 4	Meeh, Martha	Central Park East II	73
	Tucker, Reevan M.	Science and Humanities	92
	Drescher, Jon	Harbor J.H.S.	111
	Lessuck, Ruth	Academy of Environmental Sciences	114
	Levine, Denise	B.E.T.A. School	113
	Levinson, Naomi	Sports School	47
	Pape, Norman	Academy of Environmental Sciences	109
	Salzman, Marc	Sports School	46
	Spears, Brian	Sports School	85
High School	Alden, Renato G.	Stuyvesant H.S.	76
	Charlton, Alice	Washington Irving H.S.	15
	Eill, Bryna	H.S. of Music and Art	13
	Feilman, Fred	Murry Bergtraum H.S. for Business Careers	23
	Hoffman, Delores	H.S. of Art and Design	77
	Suecoff, Dorothy	Stuyvesant H.S.	97
Special Education	Lambright, Marilyn	P.S. 199	26
Independent School	Ginzberg, Rachel	Dalton	104
	Gonzalez, Margaret	Friends Seminary	62
	Grossman, Sari	Village Community	10
	Kirsch-Pretl, Karla S.	Fleming	66
	Lanckton-Connors, Barbara	Columbia Grammar and Preparatory	115
	Lanier, Madi	Fleming	9
	Mayers, Arlene I.	Midtown Ethical Culture	88
	Naitove, Christine P.	Chapin	110
	Perchick, Jacqueline	Spence	117
	Ramsay, John G.	Collegiate	112
	Roeder, John L.	Calhoun	96
	Scieszka, Jon & Shuller, Nancy	Day	34
	Sinsheimer, Joseph A.	Lenox	107
	Sternberg, Frances Rose	Midtown Ethical Culture	94
	Thompson, Barbara & Uhry, Joanna	Calhoun	35
	York, George T.	Collegiate	11
	Zlotowitz, Debbie	Churchill	51
BRONX			
C.S.D. 8	Fickling, Jocelyn	P.S. 100	105
C.S.D. 10	Platzman, Sandra	P.S. 81	67

Index by Borough and School District

District No.	Name of Teacher	School	Page
BRONX (continued)			
C.S.D. 11	Backer, Gail	P.S. 106	74
C.S.D. 12	Stecker, Marcia	C.S. 47	41
High School	Becker, Evelyn	Herbert H. Lehman H.S.	119
	Fox, Sylvia	James Monroe H.S.	14
	Hull, Barbara	Samuel Gompers H.S.	98
	Williams, Leoma	Harry S. Truman H.S.	24
Special Education	Genova, Laura J.	SLHIC—P.S. 25	20
	Meehan, Bryn	I.S. 162	121
Independent School	Pincus, Debbie	Horace Mann-Barnard	104
BROOKLYN			
C.S.D. 13	Fonollosa, Joyce & Santiago, Gloria	P.S. 133	18
C.S.D. 14	Pflaum, Jeffrey	P.S. 16	30
	Anglisano, Antoinette	J.H.S. 126	42
C.S.D. 15	Levinowitz, Les Alan	I.S. 88	80
C.S.D. 16	Thompson, Marguerite C.	P.S. 243	102
C.S.D. 17	Haller, Elizabeth	I.S. 391	70
C.S.D. 19	Adams, Sandra	P.S. 346	64
	Guage, Teresa	P.S. 65	19
	Molinelli, Rose P.	I.S. 218	68
C.S.D. 20	Campisi, Frank	J.H.S. 259	57
	DiStefano, Carol	J.H.S. 62	108
C.S.D. 22	Mandel, Marilyn	P.S. 194	72
	Weiss, Diane	P.S. 52	8
High School	Selsky, Judith	John Dewey H.S.	81
	Weiss, Eliot	Edward R. Murrow H.S.	59
Special Education	Arian, Lisa D.	Speech Services Unit—P.S. 274	49
	Levinsky, Neil S.	I.S. 227	50
	Nicolardi, Paul	William E. Grady H.S.	52
	Paris, Frances	P.S. 251	54
	Seifman, Sam	P.S. 120	27
Independent School	Brick, Barbara	Packer Collegiate	89
	Everdell, William R.	St. Ann's	56
	Schulhof, Carol	Packer Collegiate	93
	Simmons, Barbara	Berkeley—Carroll Street	103
QUEENS			
C.S.D. 24	Rymer, Judith	P.S. 143	36
C.S.D. 26	Turian, Donna	I.S. 74	44
C.S.D. 27	Beck, Mildred	P.S. 106	75
	Domingo, Daniel L.	P.S. 114	39
C.S.D. 28	Liotta, Philip	P.S. 99	90
	Miles, Barbara, J.	P.S. 30	22

Index by Borough and School District

District No.	Name of Teacher	School	Page
QUEENS (continued)			
C.S.D. 29	Levy, Suzanne	P.S. 251	38
	McCormack, Joan P.	P.S. 116	33
	Townes, Caroline	P.S. 95	37
High School	Berman, Norman	Hillcrest H.S.	12
	Dobkin, William S. & Goldstein, Kenneth	Francis Lewis H.S.	118
	Goldsmith, Clifford	John Bowne H.S.	116
	Gross, Robert	August Martin H.S.	48
	Tannebaum, Charles F.	Benjamin Cardozo H.S.	58
Special Education	Becht, Joan	Queens Occupational Training Center	25
	Robinson, Elaine	Benjamin Cardozo H.S.	120
	Stone, William	P.S. 91	53
Independent School	Letteron, Edward H.	Kew-Forest	45
STATEN ISLAND			
C.S.D. 31	Spinetta, Virginia	P.S. 69	65
	Boccasino, Rose	J.H.S. 49	43
	McCarthy, Mary Beth	I.S. 7	95

Pictured on the front cover: Frank Campisi, a teacher at JHS 259 Brooklyn and developer of *Teaching Math through Computers*, teaching teachers how to use a computer. Do you remember what it's like to do something for the first time . . . and do it right?

Cover photos: John Cole

IMPACT II

Surviving In and Utilizing the Big Apple

The Program

Surviving In and Utilizing the Big Apple helps students learn ways to make city life less threatening by using field trips and visits to various agencies and resources. Basic academic skills are reinforced through pre- and post-trip work in class. Questions about city living are elicited from students. Together with teachers and classmates, students are encouraged to explore ways to solve real and hypothetical life problems such as: Where to go for counseling; What to do if there is no heat; How to apply for a driver's license; and What to do if you get in trouble with the law. Career options are discussed and investigated through interviews, onsite visits and role playing.

The year begins with getting to know New York City. A trip to the top of the World Trade Center, or the Empire State Building, gives students a firsthand overview of the city. Back in class, students give emphasis to the experience through personal stories, trip photographs and the construction of a 3-D map of New York. Each student is assigned to report on a fiction or nonfiction book that takes place in the city. Stories about people living in New York are read aloud. Throughout the year, students are taken on numerous trips, to help them learn city survival skills as well as to develop a sense of appreciation for the more unusual and enjoyable aspects of city living. Each trip is plotted on the 3-D map. All these experiences are discussed and related to the individual through journals, creative writing and art projects.

The Students

Sixth-, seventh- and eighth-grade special education classes of 15 students each are combined. The students are reading between a 2.0 and 3.0 level. The classes meet for approximately three class periods a week, plus all day on occasions of the frequent class trips. This program can be adapted for upper-elementary grades five and six, and would also be appropriate for high school students with learning disabilities. The class size is limited by the maximum number of students with whom the teacher feels comfortable working.

The Staff

Bryn Meehan has been working as a teacher for eight years. No direct assistance is needed to implement this program, although the philosophical support of the administration is very helpful.

Materials and Facilities

The school is set up with sliding walls that can be moved back to create large working spaces. Any classroom with movable desks could be used. A duplicating machine, 16mm projector, filmstrip projector, record player and cassette recorder are desirable. Local public libraries are used, since books on a second-grade level are limited in most school libraries. An extensive bibliography is available on request. Supplementary materials include bank applications; job applications; driving test forms; welfare forms; medical, dental and insurance applications. Emphasis is placed on the necessity for competence in completing forms correctly in order to receive services.

Outside Resources

Field trips to numerous points of interest in and around New York City are the foundation of this program. Guest speakers are also invited to discuss career options.

Overall Value

"For many students in junior high school special education, an eighth-grade diploma represents the end of their formal school career," Meehan points out. "Without appropriate instruction, these students are unprepared to seek the jobs and services needed to survive in an urban environment. Without a planned and carefully implemented orientation to the resources and advantages of the city, New York remains a confusing and often hostile environment to these young adults."

More Information

Bryn Meehan
I.S. 162
600 St. Ann's Avenue
Bronx, NY 10455
Telephone: 665-0414
Principal: Harvey Goldenberg